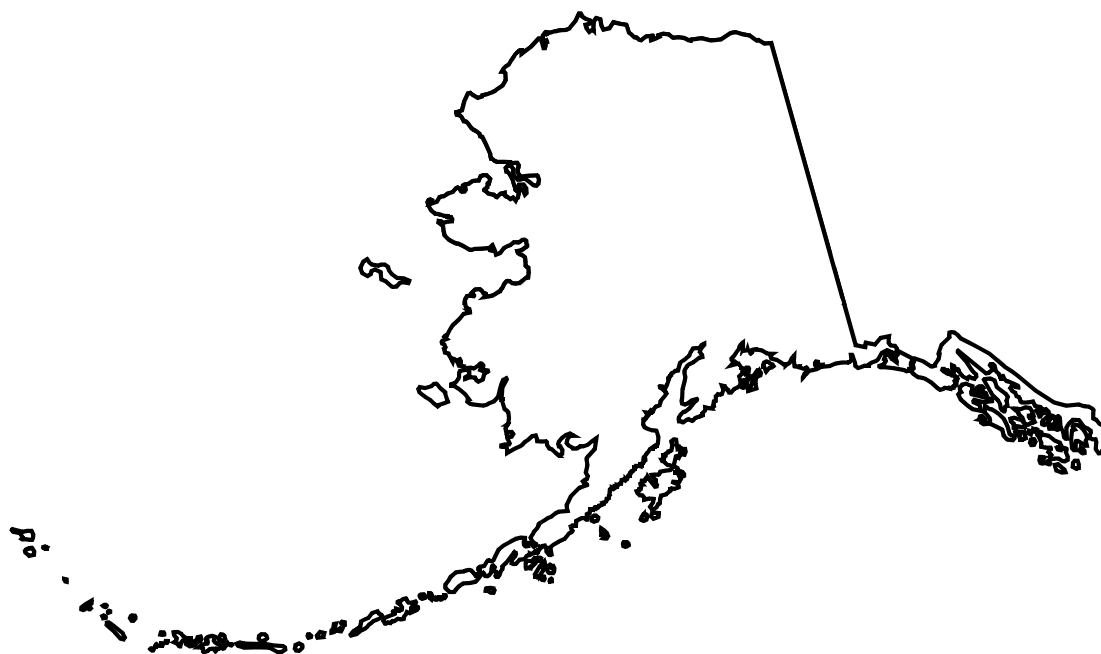


U.S. Department of the Interior
U.S. Geological Survey

Water Resources Data Alaska Water Year 2001

By D.F. Meyer, G.L. Solin, M.L. Apgar, D.L. Hess, and W.A. Swenson

Water-Data Report AK-01-1



Prepared in cooperation with the State of Alaska
and with other agencies



CALENDAR FOR WATER YEAR 2001

2000

OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7				1	2	3	4						1	2
8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9
15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16
22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23
29	30	31					26	27	28	29	30			24	25	26	27	28	29	30
														31						

2001

JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6					1	2	3					1	2	3
7	8	9	10	11	12	13	4	5	6	7	8	9	10	4	5	6	7	8	9	10
14	15	16	17	18	19	20	11	12	13	14	15	16	17	11	12	13	14	15	16	17
21	22	23	24	25	26	27	18	19	20	21	22	23	24	18	19	20	21	22	23	24
28	29	30	31				25	26	27	28				25	26	27	28	29	30	31
APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7			1	2	3	4	5						1	2
8	9	10	11	12	13	14	6	7	8	9	10	11	12	3	4	5	6	7	8	9
15	16	17	18	19	20	21	13	14	15	16	17	18	19	10	11	12	13	14	15	16
22	23	24	25	26	27	28	20	21	22	23	24	25	26	17	18	19	20	21	22	23
29	30						27	28	29	30	31			24	25	26	27	28	29	30
JULY							AUGUST							SEPTEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7				1	2	3	4							1
8	9	10	11	12	13	14	5	6	7	8	9	10	11	2	3	4	5	6	7	8
15	16	17	18	19	20	21	12	13	14	15	16	17	18	9	10	11	12	13	14	15
22	23	24	25	26	27	28	19	20	21	22	23	24	25	16	17	18	19	20	21	22
29	30	31					26	27	28	29	30	31		23	24	25	26	27	28	29
														30						

UNITED STATES DEPARTMENT OF THE INTERIOR

GALE A. NORTON, Secretary

U.S. GEOLOGICAL SURVEY

Charles G. Groat, Director

For additional information write to:
Chief, Water Resources Office, Alaska Science Center
U.S. Geological Survey
4230 University Drive -- Suite 201
Anchorage, Alaska 99508 - 4664
Electronic mail: ak_dc@usgs.gov

See additional USGS information on water resources of
Alaska
on the World Wide Web at
<http://ak.water.usgs.gov>

PREFACE

This volume of the annual hydrologic data report of Alaska is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each state, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and water quality provide the hydrologic information needed by state, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources.

The report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey (USGS) who collected, compiled, analyzed, verified, and organized the data, and who revised, edited, typed, illustrated, and assembled the report. The authors had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines. Most of the data were collected, computed, and processed from field offices. Chiefs-in-charge of the field offices are:

Ronald Rickman, Anchorage
 Bruce Bigelow, Juneau
 Robert Burrows, Fairbanks

The data were collected, computed, and processed by the following personnel:

M.L. Apgar	D.M. Evetts	J.A. McIntire	F.W. Sondrud
P.K. Atkinson	S.A. Frenzel	D.F. Meyer	P.M. Strelakos
T.P. Brabets	R.L. Glass	E.H. Moran	N.D. Stucki**
J. Brinton	J.M. Goetz	Z.J. Munstermann	S. Swanner**
R.L. Burrows	L.L. Harris	R.P. Murray	W.C. Swanner
B.A. Carr**	D.L. Hess	E.G. Neal	W.A. Swenson
M.R. Carr	R.H. Host	N. Oehler	D.S. Thomas
M.E. Castor	G.R. Jackson	R.T. Ourso	D.C. Trabant
C.H. Coffeen	M.C. Kane	L.D. Patrick	B. Wang
J.S. Conaway	R.T. Kemnitz	J.A. Roberts	M.T. Walter**
C.S. Couvillion	B.W. Kennedy	C.W. Smith	M.S. Whitman
D.L. Curfew	E.L. Kletka	R.L. Snyder**	J.M. Wiles
J.H. Curran	D.E. Langley	M.F. Schellekens	
J.S. Drewel	D. Long	C.M. Severtson	
J.D. Eash	R.S. March	G.L. Solin	

** Volunteer

This report was prepared in cooperation with the State of Alaska and with other agencies under the general supervision of Gordon L. Nelson, Chief, Water Resources Office, and William Sexton, Regional Hydrologist, Western Region.

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE October 2002		3. REPORT TYPE AND DATES COVERED Annual -- October 1, 2000 to September 30, 2001
4. TITLE AND SUBTITLE Water Resources Data for Alaska, Water Year 2001			5. FUNDING NUMBERS	
6. AUTHOR(S) D.F. Meyer, D.L. Hess, M.F. Schellekens, C.W. Smith, E.F. Snyder, and G.L. Solin				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Geological Survey, Water Resources Division 4230 University Drive, Suite 201 Anchorage, Alaska 99508-4664			8. PERFORMING ORGANIZATION REPORT NUMBER USGS-WRD-AK-01-1	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Geological Survey, Water Resources Division 4230 University Drive, Suite 201 Anchorage, Alaska 99508-4664			10. SPONSORING / MONITORING AGENCY REPORT NUMBER USGS-WRD-AK-01-1	
11. SUPPLEMENTARY NOTES Prepared in cooperation with the State of Alaska and with other agencies				
12a. DISTRIBUTION / AVAILABILITY STATEMENT No restriction on distribution. This report may be purchased from National Technical Information Service, Springfield, Virginia 22161			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) Water-resources data for the 2001 water year for Alaska consists of records of stage, discharge, and water quality of streams; stages of lakes; and water levels and water quality of ground-water wells. This volume contains records for water discharge at 112 gaging stations; stage or contents only at 4 gaging stations; water quality at 37 gaging stations; and water levels for 30 observation wells. Also included are data for 51 crest-stage partial-record stations. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Alaska.				
14. SUBJECT TERMS *Alaska, *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rate, Gaging stations, Lakes, Chemical analyses, Sediments, Water temperatures, Sampling sites, Water levels, Water analyses, Partial records			15. NUMBER OF PAGES 468	
			16. PRICE CODE Unclassified	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT	

CONTENTS

Preface	iii
List of surface-water stations, in downstream order, for which records are published in this volume	vii
List of ground-water wells, by subregion, for which records are published in this volume . .	xii
List of discontinued surface-water discharge or stage-only stations.	xiii
List of discontinued surface-water-quality stations	xxiv
Introduction	1
Cooperation	2
Acknowledgments.	3
Summary of hydrologic conditions	4
Surface water	4
Ground water	5
Water quality	5
General overview	5
Remark codes	7
Dissolved trace-element concentrations.	7
Water quality-control data	7
Water use	9
Special networks and programs.	12
Explanation of the records	14
Station identification numbers	14
Downstream order system	14
Latitude-longitude system	15
Local number	15
Records of stage and water discharge.	16
Data collection and computation.	16
Methodology	16
Computation.	16
Winter discharge measurements	17
Estimates for periods of no data.	17
Data presentation.	17
Station manuscript.	18
Data table of daily mean values.	20
Statistics of monthly mean data	20
Summary statistics	20
Identifying estimated daily discharge.	23
Accuracy of the records	23
Other data available	23
Records of surface-water quality.	24
Classification of records.	24
Arrangement of records	24
On-site measurements and sample collection.	24
Water temperature.	26
Sediment	26

Laboratory measurements.	26
Records of ground-water levels	27
Data collection and computation.	27
Data presentation.	27
Records of ground-water quality	29
Data collection and computation	29
Data presentation.	29
Access to USGS water data	29
Definition of terms.	30
Publications on Techniques of Water-Resources Investigations	43
Station records, surface water	50
Discharge at partial-record stations and miscellaneous sites	358
Crest-stage partial record stations	358
Miscellaneous sites.	370
Analyses of samples collected at miscellaneous sites	387
Station records, ground water levels	417
Index	438

FIGURES

Figure 1. Map showing locations of gaging stations.	48
Figure 2. Map showing locations of crest-stage partial-record stations	356
Figure 3. Map showing locations of ground-water wells	414

ILLUSTRATIONS

Graph of monthly mean water withdrawal rate for public supply in the Anchorage, Fairbanks, and Juneau areas, 1990-2001	11
Map showing locations of gaging stations in the Sitka area	106
Graph of Solomon Gulch profile and schematic diagram of flows.	147
Map showing location of the Bradley Lake Hydroelectric Project area	158
River ice break-up hydrograph for Kuskokwim River at Dike at Aniak, 2001	287
Map showing locations of wells in the Mendenhall Valley	416

SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER,
FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

Note--Data for partial-record stations and miscellaneous sites for both surface-water quantity and quality are published in separate sections of the data report. See end of this list for page numbers for these sections.

[Letters after station name designate type of data: (d) discharge,
(c) chemical, (i) intragravel-water temperature, (m) microbiological,
(t) water temperature, (s) sediment, (e) elevation, gage height,
(b) biological or contents]

	Station number	
SOUTHEAST ALASKA		
MAINLAND STREAMS		
Tyee Lake Outlet near Wrangell (d)	15019990 . . .	50
Harding River near Wrangell (d)	15022000 . . .	52
Stikine River near Wrangell (d)	15024800 . . .	54
Dorothy Lake Outlet (head of Dorothy Creek) near Juneau (d)	15039900 . . .	55
Taku River near Juneau (d, t, c)	15041200 . . .	57
Gold Creek at Juneau (d)	15050000 . . .	63
Salmon Creek near Juneau (d)	15051010 . . .	65
Jordan Creek below Egan Drive near Auke Bay (d, t)	15052475 . . .	66
Mendenhall River		
Nugget Creek above Diversion near Auke Bay (d)	15052495 . . .	69
Mendenhall River near Auke Bay (d)	15052500 . . .	70
Montana Creek near Auke Bay (d)	15052800 . . .	72
Duck Creek below Nancy Street near Auke Bay (d)	15053200 . . .	73
Antler River below Antler Lake near Auke Bay (d)	15055500 . . .	74
Kakuhuan Creek near Haines (d, t)	15056030 . . .	75
Kahtaheena River above Upper Falls near Gustavus (d, t)	15057580 . . .	78
Kahtaheena River near Gustavus (d, t)	15057590 . . .	81
STREAMS ON REVILLAGIGEDO ISLAND		
Swan Lake near Ketchikan (d, e)	15070000 . . .	85
Fish Creek near Ketchikan (d)	15072000 . . .	86
STREAMS ON PRINCE OF WALES ISLAND		
Staney Creek		
North Fork Staney Creek near Klawock (d, t)	15081495 . . .	88
Staney Creek near Klawock (d, t)	15081497 . . .	92
Threemile Creek near Klawock (d)	15081610 . . .	96
Halfmile Creek above diversion near Klawock (d)	15081614 . . .	97
Reynolds Creek below Lake Mellen near Hydaburg (d)	15081995 . . .	98
Old Tom Creek near Kasaan (d, t)	15085100 . . .	99
STREAMS ON WORONKOFSKI ISLAND		
Sunrise Lake Outlet near Wrangell (d, t)	15086960 . . .	103

SOUTHEAST ALASKA -- Continued

Indian River near Sitka (d, t, c, s)	15087690 ...	107
Indian River at Sitka (d, t, c, s)	15087700 ...	114
Sawmill Creek near Sitka.	15088000 ...	121
Silver Bay Tributary at Bear Cove near Sitka (d)	15088200 ...	122
STREAMS ON BARANOF ISLAND		
Green Lake near Sitka (d)	15090000 ...	123
STREAMS ON ADMIRALTY ISLAND		
Greens Creek at Greens Creek Mine near Juneau (d)	15101490 ...	124
STREAMS ON CHICHAGOF ISLAND		
Favorite Creek near Angoon (d)	15102200 ...	126
Kadashan River above Hook Creek near Tenakee (d, t)	15106920 ...	127
Middle Basin Creek near Tenakee (d, t)	15106970 ...	131
STREAMS ON DOUGLAS ISLAND		
Peterson Creek below North Fork near Auke Bay (d, c)	15109048 ...	135
MAINLAND STREAMS		
Alsek River near Yakutat (d)	15129000 ...	139
Situk River near Yakutat (d, t)	15129500 ...	140
Ophir Creek near Yakutat (d).	15129600 ...	144

SOUTH-CENTRAL ALASKA

MAINLAND STREAMS

Copper River		
Gulkana River at Sourdough (d)	15200280 ...	145
Nicolet Creek near Cordova (d)	15215990 ...	146
Solomon Lake (head of Solomon Gulch) near Valdez (e)	15225990 ...	148
Solomon Gulch tailrace near Valdez (d)	15225996 ...	149
Solomon Gulch at top of falls near Valdez (d)	15225997 ...	150
Solomon Gulch near Valdez (d).	15226000 ...	151
Wolverine Creek near Lawing (d)	15236900 ...	153
Resurrection River		
Salmon Creek		
Lost Creek		
Grouse Creek at Grouse Lake Outlet near Seward (d)	15237730 ...	155
Spruce Creek near Seward (d)	15238600 ...	156
Upper Nuka River near park boundary near Homer (d)	15238648 ...	159
Battle Creek		
Battle Creek diversion above Bradley Lake near Homer (d)	15238978 ...	161
Bradley River		
Upper Bradley River near Nuka Glacier near Homer (d)	15238990 ...	163
Bradley River near Homer (d, e)	15239000 ...	165
Bradley River below dam near Homer (d).	15239001 ...	166
Middle Fork Bradley River near Homer (d)	15239050 ...	167

SOUTH-CENTRAL ALASKA-Continued

Middle Fork Bradley River below North Fork Bradley River near		
Homer (d)	15239060 ...	169
Bradley River near Tidewater near Homer (d)	15239070 ...	170
Ninilchik River at Ninilchik (d, t, c, s, b)	15241600 ...	172
Kenai River		
Snow River near Seward (d)	15243900 ...	178
Kenai River at Cooper Landing (d)	15258000 ...	179
Cooper Creek at mouth near Cooper Landing (d, t)	15261000 ...	181
Kenai River below Skilak Lake Outlet near Sterling (d, c, t, s, b)	15266110 ...	184
Kenai River below mouth of Killey River near Sterling (d)	15266150 ...	190
Kenai River at Soldotna (d, c, t, s, b)	15266300 ...	191
Sixmile Creek near Hope (d)	15271000 ...	200
Portage Creek at Portage Lake outlet near Whittier (d)	15272280 ...	202
Twentymile River below Glacier River near Portage (d)	15272380 ...	204
Campbell Creek		
South Fork Campbell Creek near Anchorage (d, t, c, s, b, m)	15274000 ...	205
Chester Creek at Arctic Boulevard at Anchorage (d, t, c, s, b, m)	15275100 ...	212
Ship Creek near Anchorage (d)	15276000 ...	222
Eklutna Lake (head of Eklutna River) near Palmer (e)	15278000 ...	244
Matanuska River		
Knik River near Palmer (d)	15281000 ...	245
Camp Creek near Sheep Mountain Lodge (d, t)	15281500 ...	247
Moose Creek near Palmer (d, c)	15283700 ...	250
Matanuska River near Palmer (d)	15284000 ...	254
Little Susitna River near Palmer (d)	15290000 ...	256
Susitna River at Gold Creek (d)	15292000 ...	258
Talkeetna River near Talkeetna (d)	15292700 ...	259
Willow Creek near Willow (d)	15294005 ...	260
Deshka River near Willow (d, t, c, s, b)	15294100 ...	262
Johnson River above Lateral Glacier near Tuxedni Bay (d, c)	15294700 ...	269
STREAMS ON KODIAK ISLAND		
Terror River at mouth near Kodiak (d, t)	15295700 ...	272

SOUTHWEST ALASKA

MAINLAND STREAMS

Russell Creek near Cold Bay (d, t)	15297610 ...	277
Kvichak River		
Iliamna River near Pedro Bay (d)	15300300 ...	280
Kuskokwim River		
Takotna River		
Tatalina River near Takotna (d, t)	15303700 ...	281
Kuskokwim River at Liskys Crossing near Stony River (e)	15303900 ...	284
Kuskokwim River at Crooked Creek (d)	15304000 ...	285

SOUTHWEST ALASKA-Continued

Kuskokwim River at Aniak (e, t)	15304060 . . .	286
YUKON ALASKA		
Yukon River		
Fortymile River		
South Fork Fortymile River		
Walker Fork		
Wade Creek		
Wade Creek Tributary Near Chicken (d)	15320100 . . .	289
Yukon River at Eagle (d, c, s)	15356000 . . .	290
Porcupine River near International Boundary, Yukon Territory (d)	15388960 . . .	295
Yukon River near Stevens Village (d, c, s)	15453500 . . .	296
Tanana River		
Goodpaster River		
Liese Creek near Big Delta (d)	15477730 . . .	301
Goodpaster River near Big Delta (d)	15477740 . . .	302
Upper West Creek near Big Delta (d)	15477761 . . .	303
Central Creek		
Sonora Creek above tributary near Big Delta (d)	15477768 . . .	304
Sonora Creek near Big Delta (d)	15477770 . . .	306
Central Creek near Big Delta (d)	15477790 . . .	308
Delta River		
Phelan Creek near Paxson (d)	15478040 . . .	309
Salcha River near Salchaket (d)	15484000 . . .	311
Tanana River at Fairbanks (d)	15485500 . . .	312
Chena River		
Chena River near Two Rivers (d)	15493000 . . .	313
Little Chena River near Fairbanks (d)	15511000 . . .	314
Chena River at Fairbanks (d)	15514000 . . .	316
Tanana River at Nenana (d, c, s)	15515500 . . .	319
Nenana River		
Healy Creek at Suntrana near Healy (d, s)	15518020 . . .	325
Lignite Creek above mouth near Healy (d,s)	15518080 . . .	330
Koyukuk River		
Middle Fork Koyukuk River		
Slate Creek at Coldfoot (d, t)	15564879 . . .	333
Yukon River at Pilot Station (d,c,s)	15565447 . . .	336

NORTHWEST ALASKA

Unalakleet River above Chirokey River near Unalakleet (d, t)	15565700 . . .	340
Kobuk River		
Dahl Creek near Kobuk (d)	15743850 . . .	343
Kobuk River near Kiana (d)	15744500 . . .	344

NORTHWEST ALASKA-Continued

Wulik River above Ferric Creek near Kivalina (d)	15746900 . . .	345
Ikalukrok Creek below Red Dog Creek near Kivalina (d).	15746991 . . .	347
Wulik River below Tutak Creek near Kivalina (d)	15747000 . . .	348

ARCTIC SLOPE ALASKA

Nunavak Creek near Barrow (d)	15798700 . . .	350
Kuparuk River near Deadhorse (d)	15896000 . . .	352
Sagavanirktok River		
Sagavanirktok River tributary near Pump Station 3 (d).	15906000 . . .	353
Sagavanirktok River near Pump Station 3 (d)	15908000 . . .	354

* * * * *

Discharge at partial-record stations and miscellaneous sites		358
Crest-stage partial-record stations		358
Miscellaneous sites		370
Analyses of samples collected at water-quality miscellaneous sites.		387

GROUND-WATER WELLS, BY HYDROLOGIC SUBREGION,
FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

GROUND-WATER LEVELS

SOUTHEAST ALASKA

Juneau

WELL 582125134342401. Local number, CD04006631DBAD1022	417
WELL 582131134343101. Local number, CD04006631ACDC2002	417
WELL 582136134344802. Local number, CD04006631ACBC1015	418
WELL 582146134351701. Local number, CD04006631BBDD1016	418
WELL 582147134351401. Local number, CD04006631BBDB1017	419
WELL 582150134344501. Local number, CD04006631BAAD1021	419
WELL 582154134350501. Local number, CD04006630CDCB1027	420
WELL 582156134351701. Local number, CD04006631BBBA1018	420
WELL 582158134344101. Local number, CD04006630DCCC1034	421
WELL 582158134352001. Local number, CD04006630CCCD2017	421
WELL 582203134351601. Local number, CD04006630CCDB1028	422
WELL 582203134351701. Local number, CD04006630CCBD3015	422
WELL 582203134351901. Local number, CD04006630CCBD2015	423
WELL 582206134351401. Local number, CD04006630CCAC1029	423
WELL 582208134351201. Local number, CD04006630CCAB1030	424
WELL 582208134352601. Local number, CD04006630CCBB1031	424
WELL 582215134350501. Local number, CD04006630CBAD1032	425
WELL 582240134344501. Local number, CD04006630BADA2033	426
WELL 582240134352901. Local number, CD04006630BBCB1036	427
WELL 582256134340401. Local number, CD04006619DDBD1054	428
WELL 582306134344001. Local number, CD04006619DBCB1056	429
WELL 582314134344801. Local number, CD04006619BDDD1055	430
WELL 582314134351201. Local number, CD04006619BCDD2020	431
WELL 582322134341001. Local number, CD04006619ACAB1050	432
WELL 582326134341901. Local number, CD04006619ADBA1011	432
WELL 582359134352103. Local number, CD04006618CBCA3019 85177	433

SOUTH-CENTRAL ALASKA

Municipality of Anchorage

WELL 611725149335401. Local number, SB01400223BCCD1003	434
--	-----

YUKON ALASKA

Fairbanks North Star Borough

WELL 644400147151501. Local number, FD00200224ABBB1001 51659	435
WELL 644528147131201. Local number, FD00200307ACBD1001 51660	436
WELL 645434147385101. Local number, FB00100113DDBC2001 50673	437

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

The following continuous-record surface-water discharge or stage-only stations (gaging stations) in Alaska have been discontinued. Daily streamflow or stage records were collected and published for the period of record, expressed in water years, shown for each station. Those stations with an asterisk (*) after the station number are currently operated as crest-stage partial-record stations. Short-term, seasonal, and fragmented records for data collected at 190 sites in Alaska west of 141 degrees longitude during water years 1906-14 have not been entered into NWIS and are not included in this list. Information regarding these stations may be obtained from the District Office at the address given on the back side of the title page of this report.

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only)]

Discontinued surface-water discharge or stage-only stations

[Footnotes at end of table on p. xxiii]

Station name	Station number	Drainage area (mi ²)	Period of record
SOUTHEAST ALASKA			
Salmon River near Hyder (d)	15008000	a94	1963-73
Davis River near Hyder (d)	15010000	a80	1930-40
Red River near Metlakatla (d)	15011500	45.3	1963-78
White Creek near Ketchikan (d)	15011870	2.70	1977-84
Keta River near Ketchikan (d)	15011880	74.2	1977-84
Blossom River near Ketchikan (d)	15011894	68.1	1981-84
Winstanley Creek near Ketchikan (d)	15012000	15.5	1936-38 1947-75
Punchbowl Lake Outlet near Ketchikan (d)	15014000	a12	1924-30
Klahini River near Bell Island (d)	15015600	58.0	1967-73
Short Creek near Bell Island at Short Bay (d)	15016000	a20	1922-26
Shelokum Lake Outlet near Bell Island (d)	15018000	15.6	b1915-25
Tyee Creek near Wrangell (d)	15020000	ar15.2	c1922-27
Tyee Creek at Mouth near Wrangell (d)	15020100	16.1	1963-69
East Fork Bradfield River near Wrangell (d)	15020500	63.3	1979-81
Mill Creek near Wrangell (d)	15024000	a37	1915-17 c1923-28
Goat Creek near Wrangell (d)	15024750	17.3	1976-86
Cascade Creek near Petersburg (d)	15026000	23.0	1918-29 1947-73
Scenery Creek near Petersburg (d)	15028000	30.0	1949-52
Farragut River near Petersburg (d)	15028300	151	1977-93
Sweetheart Falls Creek near Juneau (d)	15030000	r36.3	b1915-27
Long Lake near Juneau (e)	15031700	30.2	1965-75
Long Lake Outlet near Juneau (d)	15032000	30.2	1913-16
Long River near Juneau (d)	15034000	32.5	1916-24 b1927-33 1952-68 R1969-73
Speel River near Juneau (d)	15036000	226	1916-18 1960-75
Crater Creek near Juneau (d)	15038000	11.4	b1913-21 c1923-24 1927-33

WATER RESOURCES DATA FOR ALASKA, 2001

Discontinued surface-water discharge or stage-only stations--Continued
 [Footnotes at end of table on p. xxiii]

Station name	Station number	Drainage area (mi ²)	Period of record
SOUTHEAST ALASKA--Continued			
Dorothy Creek near Juneau (d)	15040000	15.2	1929-41 c1942-44 1945-67
Carlson Creek at Sunny Cove near Juneau (d)	15042000	22.3	c1914 b1916-21
Carlson Creek near Juneau (d)	15044000	24.3	1951-61
Grindstone Creek near Juneau (d)	15046000	r3.75	1916-21
Sheep Creek near Juneau (d)	15048000	4.57	1911-14 1916-21 1947-73
Gold Creek near Juneau (d)**	15049900	8.41	1984-97
Salmon Creek above Canyon Mouth near Juneau (d)	15051008	9.50	R1982-90
Lemon Creek near Juneau (d)	15052000	12.1	b1951-73
Lemon Creek near Mouth near Juneau (d)	15052009	22.9	1983-86
Montana Creek near Auke Bay (d)	15052800*	15.5	1965-75 1983-87
Lake Creek at Auke Bay (d)	15053800	2.50	1964-73
Auke Creek at Auke Bay (d)	15054000	3.96	1947-50 1962-75
Herbert River near Auke Bay (d)	15054200	56.9	1967-71
Bridget Cove Tributary near Auke Bay (d)	15054600	0.95	1971-73
Davies Creek near Auke Bay (d)	15054990	15.2	1970-72
Sherman Creek at Comet (d)	15056000	3.65	1914-17
Dayebas Creek near Haines (d)	15056070	9.33	1980-81
Goat Lake Outlet near Skagway (d)	15056095	2.92	1991-97
Skagway River at Skagway (d)	15056100	a145	1964-86
West Creek near Skagway (d)	15056200	43.2	1962-77
Taiya River near Skagway (d)	15056210	179	1970-78
Upper Chilkoot Lake Outlet near Haines (d)	15056280	4.59	1993-97
Chilkat River at Gorge near Klukwan (d)	15056400	a190	1962-68
Chilkat River near Klukwan (d)	15056500	a760	1959-61
Klehini River near Klukwan (d)	15056560	284	1982-93
Purple Lake Outlet near Metlakatla (d)	15058000	6.67	1947-56
Whipple Creek near Ward Cove (d)	15059500	5.29	1968-80
Perseverance Creek near Wacker (d)	15060000	2.81	b1932-39 1947-69
Ward Creek near Wacker (d)	15062000	14.0	1949-53 R1954-58
Ketchikan Creek at Ketchikan (d)	15064000	13.5	R1910-12 bR1915-20 R1965-67

Discontinued surface-water discharge or stage-only stations--Continued
 [Footnotes at end of table on p. xxiii]

Station name	Station number	Drainage area (mi ²)	Period of record
SOUTHEAST ALASKA--Continued			
Beaver Falls Creek near Ketchikan (d)	15066000	5.8	c1917 1920-26 1928-32
Upper Mahoney Lake Outlet near Ketchikan (d)	15067900	2.03	1977-89
Mahoney Creek near Ketchikan (d)	15068000	5.70	b1920-34 1948-58 1978-81
Swan Lake (Falls Creek) near Ketchikan (d)	15070000#	36.5	b1916-34 1947-59
Ella Creek near Ketchikan (d)	15074000	19.7	1928-38 1947-58
Manzanita Creek near Ketchikan (d)	15076000	33.9	1928-37 1947-67
Grace Creek near Ketchikan (d)	15078000	30.2	1928-37 1964-69
Orchard Creek near Bell Island (d)	15080000	a59	1915-27
Traitors River near Bell Island (d)	15080500	20.8	1964-68
Staney Creek near Craig (d)	15081500	51.6	1965-81
Bonnie Creek near Klawock (d)	15081510	2.72	1981
Black Bear Lake Outlet near Klawock (d)	15081580	1.82	1980-91
Klawak River near Klawock (d)	15081620	46.1	1977
North Branch Trocadero Creek near Hydaburg (d)	15081800	17.4	1967-73
Reynolds Creek near Hydaburg (d)	15082000	a5.7	1951-56
Perkins Creek near Metlakatla (d)	15083500	3.38	1976-93
Myrtle Creek at Niblack (d)	15084000	--	1917-21
Saltery Creek near Kasaan (d)	15085000	5.53	1962-64
Cabin Creek near Kasaan (d)	15085300	8.83	1962-64
Virginia Creek near Kasaan (d)	15085400	3.08	1962-64
Indian Creek near Hollis (d)	15085600	8.82	1949-64
Harris River near Hollis (d)	15085700	28.7	1949-64
Maybeso Creek at Hollis (d)	15085800	15.1	1949-63
Wolf Lake Outlet near Hollis (d)	15085900	1.64	1995-98
Karta River near Kasaan (d)	15086000	49.5	1915-23
Neck Creek near Point Baker (d)	15086500	17.0	1960-67
Big Creek near Point Baker (d)	15086600	11.2	1964-81
Mill Creek at Wrangell (d)	15087000	0.09	1965-67
Hammer Slough at Petersburg (d)	15087200	1.46	1965-67
Municipal Watershed Creek near Petersburg (d)	15087545	2.20	1979-88
No Name Creek near Petersburg (d)	15087560	3.17	1971-73
Hamilton Creek near Kake (d)	15087570	65.0	1977-86 1988-96

WATER RESOURCES DATA FOR ALASKA, 2001

Discontinued surface-water discharge or stage-only stations--Continued
 [Footnotes at end of table on p. xxiii]

Station name	Station number	Drainage area (mi ²)	Period of record
SOUTHEAST ALASKA--Continued			
Rocky Pass Creek near Point Baker (d)	15087590	2.72	1977-88
Nakwasina River near Sitka (d)	15087610	31.9	1977-82
Sawmill Creek near Sitka (d)	15088000	39.0	c1920-23 1928-42 1946-57
Green Lake (outlet) near Sitka (d)	15090000#	r22.8	1915-25
Maksoutof River near Port Alexander (d)	15092000	a26	1951-56
Betty Lake Outlet near Port Armstrong (d)	15093200	2.66	1978-81
Sashin Creek near Big Port Walter (d)	15093400	3.72	1965-73 1975-80
East Branch Lovers Cove Creek Diversion near Big Port Walter (d)	15093600	--	1965-71
Deer Lake Outlet near Port Alexander (d)	15094000	7.41	1951-68
Coal Creek near Baranof (d)	15096000	28.5	b1922-27
Baranof River at Baranof (d)	15098000	32.0	1915-28 1958-74
Takatz Creek near Baranof (d)	15100000	17.5	1951-69
Nichols Creek near Angoon (d)	15100500	a0.12	1981
Stephens Creek near Angoon (d)	15100510	a0.14	1981
Kalinin Bay Tributary near Sitka (d)	15101200	2.28	1976-80
Greens Creek near Juneau (d)	15101500	22.8	1979-92
Hasselborg Creek near Angoon (d)	15102000	56.2	1951-68
Porcupine River near Chichagof (d)	15104000	7.12	1918-20
Falls Creek near Chichagof (d)	15106000	6.48	1918-20
Black River near Pelican (d)	15106100	24.7	1978-82
Hook Creek above Tributary near Tenakee (d)	15106940	4.48	1967-80
Hook Creek near Tenakee (d)	15106960	8.00	1966-80
Tonalite Creek near Tenakee (d)	15106980	14.5	1968-88
Kadashan River near Tenakee (d)	15107000	37.7	1964-79
West Fork Indian River near Tenakee (d)	15107910	3.02	1979-81
Indian River near Tenakee (d)	15107920	12.9	1976-82
Pavlof River near Tenakee (d)	15108000	24.3	1957-81
Hilda Creek near Douglas (d)	15108600	2.62	1967-71
Lawson Creek at Douglas (d)	15108800	2.98	1967-71
Fish Creek near Auke Bay (d)	15109000	13.6	1959-78
SOUTH-CENTRAL ALASKA			
Dick Creek near Cordova (d)	15195000	7.95	1970-81
Gakona River at Gakona (d)	15200000	a620	c1970
Tazlina River near Glennallen (d)	15202000	a2670	1949-50 1952-72

Discontinued surface-water discharge or stage-only stations--Continued
 [Footnotes at end of table on p. xxiii]

Station name	Station number	Drainage area (mi ²)	Period of record
SOUTH-CENTRAL ALASKA--Continued			
Klutina River at Copper Center (d)	15206000	a880	c1913 1949-67 c1970
Little Tonsina River near Tonsina (d)	15207800	22.7	1972-78
Tonsina River at Tonsina (d)	15208000	a420	b1950-82
Squirrel Creek at Tonsina (d)	15208100	70.5	1965-75
West Fork Kennicott River at McCarthy (d)	15209700	---	c1992-95
East Fork Kennicott River at McCarthy (d)	15209800	---	c1991-92
Tebay River near Chitina (d)	15211500	a55.4	1962-65
Copper River near Chitina (d)	15212000	a20600	c1950 c1952-53 1956-90
Copper River at Million Dollar Bridge near Cordova (d)	15214000	24200	b1907-10 c1913 1988-95
Heney Creek at canyon mouth near Cordova (d)	15215992	1.53	1992-93
Power Creek near Cordova (d)	15216000	20.5	c1913 1947-95
Middle Arm Eyak Lake Tributary near Cordova (d)	15216003	2.90	1992-93
Murchison Creek near Cordova (d)	15216008	a0.37	1992-93
Humpback Creek near Cordova (d)	15216100	4.37	c1913 1974-75
West Fork Olsen Bay Creek near Cordova (d)	15219000	4.78	1964-81
Duck River at Silver Lake Outlet near Valdez (d)	15223900	25.1	1982-85
Duck River near Tidewater near Valdez (d)	15224000	26.7	c1913-14 1982-85
Solomon Gulch Bypass near Valdez (d)	15225998	---	c1986-94
Lowe River near Valdez (d)	15226500	201	1971-74
Lowe River in Keystone Canyon near Valdez (d)	15226600	222	1975-76
Hobo Creek near Whittier (d)	15236000	5.53	c1913 1990-2000
Nellie Juan River near Hunter (d)	15237000	133	1961-65
Main Bay Creek near Port Nellie Juan (d)	15237020	5.93	1981-84
San Juan River near Seward (d)	15237360	12.4	1986-96
Resurrection River at Seward (d)	15237700	169	1965-68
Bear Creek Tributary near Seward (d)	15237800	1.63	1967-68
Lost Creek near Seward (d)	15238000	8.42	1948-50
Lowell Creek above city wells at Seward (d)	1523849020	3.73	1993-95
Lowell Creek at Seward (d)	15238500	4.02	1965-68 1991-93
Nuka River near Tidewater near Homer (d)	15238653	a38	1984-85

Discontinued surface-water discharge or stage-only stations--Continued
 [Footnotes at end of table on p. xxiii]

Station name	Station number	Drainage area (mi ²)	Period of record
SOUTH-CENTRAL ALASKA--Continued			
Seldovia River near Seldovia (d)	15238795	26.2	1979-80
Barabara Creek near Seldovia (d)	15238820	20.7	1972-92
Tutka Lagoon Creek near Homer (d)	15238860	10.8	1973-76
Battle Creek below Glacier near Homer (d)	15238982	g11.8	1991-93
South Fork Battle Creek near Homer (d)	15238984	a6.5	1991-93
Battle Creek near Tidewater near Homer (d)	15238985	ag21	1991-93
Fritz Creek near Homer (d)	15239500*	10.4	1967-70 1986-92
Twitter Creek near Homer (d)	15239880	16.1	1971-73
Anchor River near Anchor Point (d)	15239900*	137	1965-73 1979-86 1991-92
Anchor River at Anchor Point (d)	15240000	224	1953-66
Kasilof River near Kasilof (d)	15242000	738	1949-70
Snow River near Divide (d)	15243500	a99.8	1961-65
Ptarmigan Creek at Lawing (d)	15244000	32.6	1947-58
Grant Creek near Moose Pass (d)	15246000	44.2	1947-58
Trail River near Lawing (d,e)	15248000	181	d1947-74 e1975-77
Crescent Creek near Moose Pass (d)	15253000	21.4	1957-60
Crescent Creek near Cooper Landing (d)	15254000	31.7	1949-66
Cooper Creek near Cooper Landing (d)	15260000	31.8	1949-59
Stetson Creek near Cooper Landing (d)	15260500	a8.6	1958-63
Russian River near Cooper Landing (d)	15264000	61.8	1947-54
Beaver Creek near Kenai (d)	15266500	a51	1968-78
Bernice Lake near Kenai (e)	15266895	--	1977-79
Bishop Creek near Kenai (d)	15267000	a24.2	1977-79
Resurrection Creek near Hope (d)	15267900	149	1968-86
Resurrection Creek at Hope (d)	15268000	162	1950-51
Glacier Creek at Girdwood (d)	15272550	r58.2	1965-78
Rabbit Creek at Anchorage (d)	15273050	a15	1979-80 1984-85
Little Rabbit Creek above Goldenview Drive at Anchorage (d)	15273095	5.06	1981-85
Little Rabbit Creek at Anchorage (d)	15273102	5.94	1979-80
Rabbit Creek at New Seward Highway at Anchorage (d)	15273105	a24.5	1984-86
South Fork Campbell Creek at Canyon Mouth near Anchorage (d)	15273900	25.2	1967-79
North Fork Campbell Creek near Anchorage (d)	15274300	13.4	1974-84
Little Campbell Creek at Nathan Drive near Anchorage (d)	15274550	a15	c1981 1986-92
Campbell Creek near Spenard (d)	15274600	69.7	1966-93

Discontinued surface-water discharge or stage-only stations--Continued
 [Footnotes at end of table on p. xxiii]

Station name	Station number	Drainage area (mi ²)	Period of record
SOUTH-CENTRAL ALASKA--Continued			
Sand Lake near Spenard (e)	15274700	--	c1967-74
South Branch South Fork Chester Creek near East 20th Ave. at Anchorage (d)	15274798	9.39	1981-84
Chester Creek at Anchorage (d)	15275000	20.0	1958-76
Ship Creek at Elmendorf Air Force Base near Anchorage (d)	15276500	113	1963-71
Ship Creek below Power Plant at Elmendorf Air Force Base (d)	15276570	115	1971-81
Ditch on Elmendorf Air Force Base (d)	15276650	3.73	1973-75
Eagle River at Eagle River (d)	15277100	a192	1966-81
Peters Creek near Birchwood (d)	15277410	87.8	1973-83
East Fork Eklutna Creek near Palmer (d)	15277600	538.2	1960-62 1985-89
West Fork Eklutna Creek near Palmer (d)	15277800	25.4	1960-62 1985-89
Eklutna Creek near Palmer (d)	15280000	119	1947-54 R1955-62
Knik River near Palmer (d)	15281000	a1180	1960-88 1992
Caribou Creek near Sutton (d)	15282000	289	1955-78
Palmer Hayflat at railroad near Palmer (e)	15284500		1992-97
Cottonwood Creek near Wasilla (d)	15286000	28.5	1949-54 1998-2000
Susitna River near Denali (d)	15291000	a950	1957-66 1968-86
Maclaren River near Paxson (d)	15291200	a280	1958-86
Susitna River near Cantwell (d)	15291500	a4140	1961-72 1980-86
Chulitna River near Talkeetna (d)	15292400	a2570	1958-72 1980-86
Susitna River at Sunshine (d)	15292780	a11100	1981-86
Deception Creek near Willow (d)	15294010	48.0	1978-85
Skwentna River near Skwentna (d)	15294300	a2250	1960-82
Yentna River near Susitna Station (d)	15294345	a6180	1981-86
Susitna River at Susitna Station (d)	15294350	a19400	1975-93
Capps Creek below North Capps Creek near Tyonek (d)	15294410	10.5	1979-85
Chuitna River near Tyonek (d)	15294450	131	1976-86
Chakachatna River near Tyonek (d)	15294500	a1120	1959-72
Montana Bill Creek at pipeline near Kenai (d)	15294585	--	c1991-92
Paint River near Kamishak (d)	15294900	205	1983-85 1989 1991-95
Little Kitoi Creek near Afognak (d)	15295500	2.63	1960-61

WATER RESOURCES DATA FOR ALASKA, 2001

Discontinued surface-water discharge or stage-only stations--Continued
 [Footnotes at end of table on p. xxiii]

Station name	Station number	Drainage area (mi ²)	Period of record
SOUTH-CENTRAL ALASKA--Continued			
Terror River near Kodiak (d)	15295600	15.0	1962-68 1978-82 R1983-86
Uganik River near Kodiak (d)	15296000	123	1951-78
Spiridon Lake Outlet near Larsen Bay (d)	15296300	23.3	1962-65
Larsen Bay Creek near Larsen Bay (d)	15296480	3.92	1980-84
Falls Creek near Larsen Bay (d)	15296500	5.67	1974-75
Canyon Creek near Larsen Bay (d)	15296520	8.82	1974-76
Upper Thumb River near Larsen Bay (d)	15296550	18.8	1974-82
Karluk River at Outlet near Larsen Bay (d)	15296600	100	1975-76 1979-82
Akalura Creek at Olga Bay (d)	15296950	18.4	1975-76
Dog Salmon Creek near Ayakulik (d)	15297000	72.9	1960-61
Hidden Basin Creek near Port Lions (d)	15297100	3.01	1982-84
Hidden Basin Creek near Mouth near Kodiak (d)	15297110	11.9	1983-84
Myrtle Creek near Kodiak (d)	15297200*	4.74	1963-86
Middle Fork Pillar Creek near Kodiak (d)	15297450	2.02	1969-70
Monashka Creek near Kodiak (d)	15297470	5.51	1972 R1973-76
Falls Creek near Port Lions (d)	15297482	a4.3	1981-83
Kizhuyak River near Port Lions (d)	15297485	42.5	1980-94
SOUTHWEST ALASKA			
Whiskey Bills Creek near Sand Point (d)	15297602	a0.30	1983-84
Humboldt Creek at Sand Point (d)	15297603	a5.2	1983-84
Sweeper Creek at Adak (d)	15297617	1.0	1992-96
Moffett Creek at Adak (d)	15297625	4.5	1993-96
Limpet Creek on Amchitka Island (d)	15297640	1.69	1968-72
Falls Creek on Amchitka Island (d)	15297650	0.86	1968-72
Clevenger Creek on Amchitka Island (d)	15297655	0.28	1968-74
Constantine Spring Creek on Amchitka Island (d)	15297660	--	1968-73
Bridge Creek on Amchitka Island (d)	15297680	3.03	1968-74
White Alice Creek on Amchitka Island (d)	15297690	0.79	1968-74
Lake Creek at Shemya Air Force Base (d)	15297767	a1.0	1971-73
Gallery Spring at Shemya Air Force Base (d)	15297771	--	1971-72
Gallery Creek at Shemya Air Force Base (d)	15297773	a1.0	1971-73
Eskimo Creek at King Salmon (d)	15297900	16.1	1973-76 1978-84
Tanalian River near Port Alsworth (d)	15298000	a200	1951-56
Tazimina River near Nondalton (d)	15299900	327	1981-86

Discontinued surface-water discharge or stage-only stations--Continued
 [Footnotes at end of table on p. xxiii]

Station name	Station number	Drainage area (mi ²)	Period of record
SOUTHWEST ALASKA--Continued			
Newhalen River near Iliamna (d)	15300000	3478	1951-67 1982-86
Kvichak River at Igiugig (d)	15300500	a6500	1967-87
Allen River near Aleknagik (d)	15301500	278	1963-66
Nuyakuk River near Dillingham (d)	15302000	1490	1953-96
Nushagak River at Ekwok (d)	15302500	a9850	1978-93
Grant Lake Outlet near Aleknagik (d)	15302800	r34.3	1959-65
Elva Lake Outlet near Aleknagik (d)	15302840	9.00	1980-82
Wood River near Aleknagik (d)	15303000	a1110	1957-70
Silver Salmon Creek near Aleknagik (d)	15303010	4.46	1985-86 c1988-89
Wood River Tributary near Aleknagik (d)	15303011	3.35	c1990 c1992-93
East Creek near Dillingham (d)	15303100	2.12	1973-75
Snake River near Dillingham (d)	15303150	113	1973-83
Kuskokwim River at McGrath (d)	15303600	a11700	1963-73
Kisaralik River near Akiak (d)	15304200	265	1980-87
Browns Creek near Bethel (d)	15304293	4.79	c1985-94
Browns Creek at Bethel (d)	15304298	10.5	c1985
YUKON ALASKA			
King Creek near Dome Creek (d)	15344000*	5.87	1983-90
Fortymile River near Steele Creek (d)	15348000	a5880	c1910-12 1976-82
Porcupine River at Old Crow, Yukon Territory, Canada (d)	15388950	a21400	f1980-89
Porcupine River near Fort Yukon (d)	15389000	a29500	1964-79
Chandalar River near Venetie (d)	15389500	a9330	1963-73
Boulder Creek near Central (d)	15439800*	31.3	1966-82 1984-86
Hess Creek near Livengood (d)	15457800	662	1970-78 1982-86
Yukon River at Rampart (d)	15468000	a199400	1955-67
Chisana River at Northway Junction (d)	15470000	a3280	1949-71
Tanana River near Tok Junction (d)	15472000	a6800	1950-53
Tok River near Tok Junction (d)	15474000	a930	1952-54
Tanana River near Tanacross (d)	15476000	a8550	1953-90
Berry Creek near Dot Lake (d)	15476300*	65.1	1971-81
Dry Creek near Dot Lake (d)	15476400	57.6	1966-69
Clearwater Creek near Delta Junction (d)	15477500	a360	1977-79
Tanana River at Big Delta (d)	15478000	a13500	1949-52 1954-57

WATER RESOURCES DATA FOR ALASKA, 2001

Discontinued surface-water discharge or stage-only stations--Continued
 [Footnotes at end of table on p. xxiii]

Station name	Station number	Drainage area (mi ²)	Period of record
YUKON ALASKA--Continued			
Tanana River near Harding Lake (e)	15481000	17240	c1968-82
Moose Creek at Eielson Air Force Base (d)	15485000	136	1964-65
Garrison Slough at Eielson Air Force Base (d)	15485200	6.24	1964-65
Chena River near North Pole (d)	15493500	r1445	1972-80
Chena River below Moose Creek Dam (d)	15493700	1,460	1979-96
Wood River near Fairbanks (d)	15514500	855	1968-78
Seattle Creek near Cantwell (d)	15515800	36.2	1966-75
Nenana River near Windy (d)	15516000	a710	1950-56
Nenana River near Healy (d)	15518000	a1910	1951-79
Nenana River at Healy (d)	15518040	a2100	1990-91
Nenana River near Rex (d)	15518300	a2450	1965-68
Teklanika River near Lignite (d)	15518350	490	1965-74
Chatanika River above Poker Creek near Chatanika (d)	15534800	419	1996
Poker Creek near Chatanika (d)	15534900	23.1	1971-78
Caribou Creek near Chatanika (d)	15535000	9.19	1970-84
Long Creek at Long near Ruby	15564450	25.4	1995-97
Melozitna River near Ruby (d)	15564600	2693	1961-73
Yukon River at Ruby (d)	15564800	a259000	1957-78
Middle Fork Koyukuk River near Wiseman (d)	15564875	a1200	1970-78 1984-87
Wiseman Creek at Wiseman (d)	15564877	49.2	1970-78
Jim River near Bettles (d)	15564885	465	1970-77
Koyukuk River at Hughes (d)	15564900	a18400	1960-82
Yukon River near Kaltag (d)	15565200	a296000	1957-66
Ophir Creek near Takotna (d)	15565235	6.19	1975-80
Yukon River at Pilot Station (d)	15565447	321,000	1975-96
NORTHWEST ALASKA			
Snake River near Nome (d)	15621000	85.7	1965-81 1982-91
Eldorado Creek near Teller (d)	15635000	5.83	1988-90 1992-98
Gold Run Creek near Teller (d)	15637000*	24.2	c1986-88
Crater Creek near Nome (d)	15668200	21.9	1975-85
Kuzitrin River near Nome (d)	15712000	a1720	c1908-10 1962-73
Humboldt Creek near Serpentine Hot Springs near Nome (d)	15716010	8.15	c1992-93
June Creek near Kotzebue (d)	15743000	10.9	1965-67
Kobuk River at Ambler (d)	15744000	a6570	1965-78
Noatak River at Noatak (d)	15746000	a12000	c1965-71

Discontinued surface-water discharge or stage-only stations--Continued
 [Footnotes at end of table on p. xxiii]

Station name	Station number	Drainage area (mi ²)	Period of record
NORTHWEST ALASKA--Continued			
Ikalukrok Creek above Red Dog Creek near Noatak (d)	15746980	59.2	1991-92
Red Dog Mine clean water ditch near Noatak (d)	15746983	4.74	1991-92
North Fork Red Dog Creek near Kivalina (d)	15746988*	15.9	1991-92
Red Dog Creek above mouth near Noatak (d)	15746990	24.6	1991-92
Ogotoruk Creek near Point Hope (d)	15748000	a35	c1958-62
ARCTIC SLOPE ALASKA			
Esatkuat Creek near Barrow (d)	15799000	a1.46	c1972-73
Esatkuat Lagoon Outlet at Barrow (d)	15799300	a3.52	c1972-73
Meade River at Atkasuk (d)	15803000	a1800	c1977
Teshkepuk Lake Outlet near Lonely (e)	15829995	a1400	c1977
Miguakiak River near Teshekpuk Lake near Lonely (d)	15830000	a1460	c1977
Colville River near Nuiqsut (d)	15880000	20670	c1977
Putuligayuk River near Deadhorse (d)	15896700	a176	1970-79 c1980 1982-86 c1987-95
Atigun River near Pump Station 4 (d)	15904800	48.7	1991-94
Atigun River Tributary near Pump Station 4 (d)	15904900*	32.6	1977-86
Sagavanirktok River near Sagwon (d)	15910000	2208	1970-78
Chamberlin Creek near Barter Island (d)	15975000	1.46	c1958
Neruokpukkoonga Creek near Barter Island (d)	15976000	123	c1958

* Currently operated as a crest-stage partial-record station

** Currently operated as a water-quality partial record station

Currently operated as a monthly discharge and reservoir elevation station

a Approximately

b Break in record

c Fragmentary or seasonal

f Additional record for water years 1961-79 available from discharge records of Water Survey of Canada

g Prior to diversion upstream

r Revised

R Regulated

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

The following continuous-record surface-water-quality stations in Alaska have been discontinued. Daily records of temperature, specific conductance, or sediment were collected and published for the period of record shown for each station. Information regarding these stations may be obtained from the District Office at the address given on the back side of the title page of this report.

[Type of record: Temp. (temperature), S.C. (specific conductance), Sed. (sediment)]

Discontinued continuous record surface-water-quality stations
[Footnotes at end of table on p. xxviii]

Station name	Station number	Drainage area (mi ²)	Type of record	Period of record (water years)
SOUTHEAST ALASKA				
White Creek near Ketchikan	15011870	2.70	Temp., S.C.	1978-83
Keta River near Ketchikan	15011880	74.2	Temp., S.C.	1978-81, 1983-84
Blossom River near Ketchikan	15011894	68.1	Temp., S.C.	1981-84
Stikine River near Wrangell	15024800	a19,920	Temp. Sed.	1976-82 1982
Speel River near Juneau	15036000	226	Temp., Sed.	1960
Dorothy Lake Outlet (head of Dorothy Creek) near Juneau	15039900	11.0	Temp	1996-99
Duck Creek below Nancy Street near Auke Bay	15053200	--	Temp	1997-99
Lake Creek at Auke Bay	15053800	2.50	Temp	1963-73
Auke Creek at Auke Bay	15054000	3.96	Temp.	1962-75
Davies Creek near Auke Bay	15054990	15.2	Temp.	1969-72
Skagway River at Skagway	15056100	a145	Temp., S.C.	1979-82 1980-82
Taiya River near Skagway	15056210	149	Temp.	1971-74, 1977
Chilkat River at Gorge near Klukwan	15056400	a190	Temp.	1962-67
Chilkat River near Klukwan	15056500	a760	Temp., Sed., S.C.	1960
Grace Creek near Ketchikan	15078000	30.2	Temp.	1965-69
Traitors River near Bell Island	15080500	20.8	Temp.	1965-68
Staney Creek near Craig	15081500	51.6	Temp.	1966-79
Klawak River near Klawock	15081620	46.1	Temp.	1976-77
Perkins Creek near Metlakatla	15083500	3.38	Temp.	1976-93
Saltery Creek near Kasaan	15085000	5.53	Temp.	1962-64
Cabin Creek near Kasaan	15085300	8.83	Temp.	1962-64
Virginia Creek near Kasaan	15085400	3.08	Temp.	1962-64
Big Creek near Point Baker	15086600	11.2	Temp.	1963-80
Zarembo Creek near Point Baker	15087110	1.27	Temp.	1979-80
Hamilton Creek near Kake	15087570	65.0	Temp.	1982-86, 1989-96
Rocky Pass Creek near Point Baker	15087590	2.72	Temp.	1978-79, 1981-82
Nakwasina River near Sitka	15087610	31.9	Temp.	1976-82
Betty Lake outlet at Port Armstrong	15093200	2.66	Temp.	1978-81
Sashin Creek near Big Port Walter	15093400	3.72	Temp.	1966-77

Discontinued continuous record surface-water-quality stations--Continued
 [Footnotes at end of table on p. xxviii]

Station name	Station number	Drainage area (mi ²)	Type of record	Period of record (water years)
SOUTHEAST ALASKA--Continued				
East Branch Lovers Cove Creek Diversion near Big Port Walter	15093600	--	Temp.	1965-71
Kalinin Bay tributary near Sitka	15101200	2.28	Temp.	1976-79
Greens Creek near Juneau	15101500	22.8	Temp. S.C.	1978-84 1979-85
Wheeler Creek near Douglas	15101600	57.1	Temp.	1970-73
North Arm Creek near Angoon	15102350	8.64	Temp.	1971-78
Hood Bay Creek near Angoon	15102400	--	Temp.	1970-71
Hook Creek above tributary near Tenakee	15106940	4.48	Temp.	1967-80
Hook Creek near Tenakee	15106960	8.00	Temp.	1966-78
Tonalite Creek near Tenakee	15106980	14.5	Temp. S.C., Sed.	1968-84, 1986-88 1972
Kadashan River near Tenakee	15107000	37.7	Temp.	1966-79
SOUTH-CENTRAL ALASKA				
Dick Creek near Cordova	15195000	7.95	Temp.	1971-79
Gakona River at Gakona	15200000	a620	Temp., S.C.	1953-54
Gulkana River at Sourdough	15200280	1,770	Temp.	1972-78
Klutina River at Copper Center	15206000	a880	Temp, S.C.	1953
Little Tonsina River near Tonsina	15207800	22.7	Temp.	1973-78
Tonsina River at Tonsina	15208000	a420	Temp., S.C.	1953, 1959-66
Copper River near Chitina	15212000	a20,600	Temp Sed. S.C.	1957, 1964-65, 1979-81 1957, 1963-65 1957
Humpback Creek near Cordova	15216100	4.37	Temp.	1973-75
West Fork Olsen Bay Creek near Cordova	15219000	4.78	Temp.	1964-79
Duck River at Silver Lake outlet near Valdez	15223900	25.1	Temp.	1982-84
Duck River near tidewater near Valdez	15224000	26.7	Temp.	1982-84
Duck River above the Lagoon near Valdez	15224002	--	Temp.	1982-84
Lowe River in Keystone Canyon near Valdez	15226600	222	Temp.	1975-76
Tutka Lagoon Creek near Homer	15238860	10.8	Temp.	1973-76
Upper Bradley River near Homer	15238990	a10.0	Temp.	1979-90
Bradley River below dam near Homer	15239001	a66.0	Temp	1990-99
Bradley River near Tidewater near Homer	15239070	--	Temp	1986-99
Anchor River at Anchor Point	15240000	224	Temp., S.C.	1954, 1959-66
Ninilchik River at Ninilchik	15241600	131	Temp. Sed.	1963, 1965 1963-65
Trail River near Lawing	15248000	181	Temp.	1959-67
Kenai River at Cooper Landing	15258000	634	Temp., S.C.	1950

Discontinued continuous record surface-water-quality stations--Continued
 [Footnotes at end of table on p. xxviii]

Station name	Station number	Drainage area (mi ²)	Type of record	Period of record (water years)
SOUTH-CENTRAL ALASKA--Continued				
Kenai River at Soldotna	15266300	2,010	Sed.	1979-80
Beaver Creek near Kenai	15266500	a51	Temp.	1970-75
Bishop Creek near Kenai	15267000	a24.2	S.C.	1977-79
Rabbit Creek at Anchorage	15273050	a15	Temp.	1984-86
Little Rabbit Creek above Goldenview Drive at Anchorage	15273095	5.06	Temp.	1983-86
Rabbit Creek at New Seward Highway at Anchorage	15273105	a24.5	Temp.	1984-86
Little Campbell Creek at Nathan Drive near Anchorage	15274550	a15.0	Temp. Sed.	1986-87 b1988-91
Campbell Creek near Spenard	15274600	69.7	Sed.	1986, 1988
Middle Fork Chester Creek at Nichols Street at Anchorage	611207149483600	--	Temp.	1982
Chester Creek at Anchorage	15275000	20.0	Temp.	1982
Chester Creek at Arctic Boulevard at Anchorage	15275100	27.2	Temp., S.C. Sed.	1981-86 b1988-91
Ship Creek near Anchorage	15276000	90.5	Temp.	1949-50
Ship Creek below powerplant at Elmendorf Air Force Base	15276570	115	Temp.	1970-80
Eagle River at Eagle River	15277100	a192	Temp. Sed., S.C.	1968-69, 1971 1967-69, 1971
East Fork Eklutna Creek near Palmer	15277600	38.2	Sed.	1985-87
West Fork Eklutna Creek near Palmer	15277800	25.4	Sed.	1985-87
Eklutna Creek near Palmer	15280000	119	Temp.	1950
Knik River near Palmer	15281000	a1,180	Temp. Sed. S.C.	1963, 1965 1962-66 1972
Chickaloon River near Sutton	15282800	--	Temp.	1953-54
Matanuska River at Palmer	15284000	a2,070	Temp. Sed. S.C.	1952-53, 1959-66 1953-54, 1959-66 1965-67, 1972
Susitna River near Denali	15291000	a950	Temp.	1974-82
Susitna River near Cantwell	15291500	a4,140	Temp.	1980, b1982-86
Susitna River at Gold Creek	15292000	a6,160	Temp. Sed.	1957, 1974-80, 1982-85 1952, 1957
Chulitna River near Talkeetna	15292400	a2,570	Temp.	b1982-86
Talkeetna River near Talkeetna	15292700	2,006	Temp.	1954
Susitna River at Sunshine	15292780	a11,100	Temp.	b1981-85
Willow Creek near Willow	15294005	166	Temp.	b1978-90
Deception Creek near Willow	15294010	48.0	Temp.	b1978-85
Yentna River near Susitna Station	15294345	a6,180	Temp.	b1981-86
Susitna River at Susitna Station	15294350	a19,400	Temp.	1975-80, b1983-86
Chuitna River near Tyonek	15294450	131	Temp.	1976-78
Falls Creek near Larsen Bay	15296500	5.67	Temp.	1974-75

Discontinued continuous record surface-water-quality stations--Continued
[Footnotes at end of table on p. xxviii]

Station name	Station number	Drainage area (mi ²)	Type of record	Period of record (water years)
SOUTH-CENTRAL ALASKA--Continued				
Canyon Creek near Larsen Bay	15296520	8.82	Temp.	1974-76
East Fork Upper Thumb River near Larsen Bay	15296545	8.99	Temp.	1979-82
Upper Thumb River near Larsen Bay	15296550	18.8	Temp.	1974-82
Thumb River near Larsen Bay	15296554	25.3	Temp.	1979-82
Karluk River at outlet near Larsen Bay	15296600	100	Temp.	1975-76, 1978-82
Akalura Creek at Olga Bay	15296950	18.4	Temp.	1975-76
Kizhuyak River near Port Lions	15297485	c42.5	Temp.	b1980-86, 1987-94
SOUTHWEST ALASKA				
Tazimina River near Nondalton	15299900	327	Temp.	1982-86
Nushagak River at Ekwok	15302500	a9,850	Temp.	1979-80, 1982
East Creek near Dillingham	15303100	2.12	Temp.	1973-76
Snake River near Dillingham	15303150	113	Temp.	1974-80
Kuskokwim River at Medfra	630615154424500	--	Temp.	1954
Kuskokwim River at Crooked Creek	15304000	a31,100	Temp. S.C.	1957-67, 1977-79 1957-67
YUKON ALASKA				
Yukon River at Eagle	15356000	a113,500	Temp. Sed.	1951-52, 1962-63, 1965-66 1962-66
Hess Creek near Livengood	15457800	662	Temp.	1971-72, 1976-77
Yukon River at Rampart	15468000	a199,400	Temp., S.C.	1954-56, 1961-64
Tanana River near Tok Junction	15472000	a6,800	Temp., S.C.	1951-53
Tanana River near Tanacross	15476000	a8,550	Temp., S.C. Sed.	1954, 1957-66
Tanana River at Big Delta	15478000	13,500	Temp. S.C.	1949-51 1949-52
Chena River near North Pole	15493500	1,430	Temp.	1972-79
Little Chena River near Fairbanks	15511000	372	Temp.	1972-81
Chena River at Fairbanks	15514000	a1,980	Temp. Sed. S.C.	1953, 1962-66, 1969-71 1962-71 1968-71
Tanana River at Nenana	15515500	a25,600	Temp. S.C.	1954-56 1954-57
Nenana River near Healy	15518000	a1,910	Temp. Sed., S.C.	1957-66 1953-66
Nenana River at Healy	15518040	a2,100	Temp.	1949
Caribou Creek near Chatanika	15535000	9.19	Temp.	1972-73
Long Creek at Long near Ruby	15564450	25.4	Temp.	1995-97

WATER RESOURCES DATA FOR ALASKA, 2001

Discontinued continuous record surface-water-quality stations--Continued
 [Footnotes at end of table on p. xxviii]

Station name	Station number	Drainage area (mi ²)	Type of record	Period of record (water years)
YUKON ALASKA--Continued				
Yukon River at Ruby	15564800	a259,000	Temp. S.C.	1966-67, 1969-74 1966-74
Yukon River at Galena	15564860	--	Temp., S.C.	1954
Middle Fork Koyukuk River near Wiseman	15564875	a1,200	Temp.	1971-72, 1976-79
Wiseman Creek at Wiseman	15564877	49.2	Temp.	1973, 1976
Jim River near Bettles	15564885	11.7	Temp.	1971-76
Yukon River at Pilot Station	15565447	a321,000	Temp.	1976, 1978
NORTHWEST ALASKA				
Eldorado Creek near Teller	15635000	5.83	Temp.	1995-98
Kobuk River near Kiana	15744500	a9,520	Temp.	1978-81
Ogotoruk Creek near Hope	15748000	a35	Temp., Sed.	1959
ARCTIC SLOPE ALASKA				
Kuparuk River near Deadhorse	15896000	3,130	Temp.	1971-72, 1976, 1978-79
Putligayuk River near Deadhorse	15896700	a176	Temp.	1976
Sagavanirktok River near Sagwon	15910000	229	Temp.	1971

- a Approximately
 b Seasonal
 c After diversion upstream beginning 1985

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with State and other agencies, obtains a large amount of data pertaining to the water resources of Alaska each water year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the Geological Survey, the data are published annually in this report series entitled "Water Resources Data - Alaska."

Water resources data for the 2001 water year for Alaska consist of records of stage, discharge, and water quality of streams; stages of lakes; and water levels and water quality of ground water. This volume contains records for water discharge at 112 gaging stations; stage or contents only at 4 gaging stations; water quality at 37 gaging stations; and water levels for 30 observation wells. Also included are data for 51 crest-stage partial-record stations. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Alaska.

Records of discharge and stage of streams, stage of lakes, chemical quality, water temperatures, and suspended sediment were first published in U.S. Geological Survey Water-Supply Papers. Through September 30, 1960, these data were published in seven Water-Supply Papers entitled "Quantity and Quality of Surface Waters of Alaska" (through 1950, 1951-53, 1954-56, 1957, 1958, 1959, 1960). Since 1960, streamflow records and related data were published in a five-year series of Water-Supply Papers for 1961-65 and 1966-70 entitled "Surface Water Supply of the United States." Water-quality records were published in a Water-Supply Paper entitled "Quality of Surface Waters of Alaska, 1961-63" and after then until 1970 in an annual series of Water-Supply Papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1949 to 1974 in a series of Water-Supply Papers entitled "Ground-Water Levels in the United States." Water-Supply Papers may be consulted in the libraries of the principal cities in the United States or may be purchased from U.S. Geological Survey, Branch of Information Services, Box 25286, Denver, CO 80225.

For water years 1961 through 1970, streamflow data were also released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1970 were similarly released either in separate reports or in conjunction with streamflow records.

Beginning with the 1971 water year, water data for streamflow, water quality, and ground water are published in official Survey reports on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report AK-01-1." These water-data reports are for sale, in paper copy or in microfiche, by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161. Additional information, including current prices, for ordering specific reports may be obtained from the District Chief at the address given on the back of the title page or by telephone (907) 786-7100.

The USGS is continually updating the availability of its information on the World Wide Web. Current streamflow conditions (via satellite) for Alaska and other Alaskan water resource information can be found at the following Universal Resource Locator (URL): <<http://ak.water.usgs.gov/>>. Nationwide information on water resources, including real-time and historic streamflow data, water-use data, publications and USGS program activities, can be found at URL: <http://water.usgs.gov/>.

COOPERATION

The U.S. Geological Survey and organizations of the State of Alaska have had cooperative agreements since 1958 for the systematic collection of streamflow records, water-quality records, and ground-water levels. Organizations that assisted in collecting data contained in this report through cooperative agreements with the USGS are:

Alaska Department of Community and Economic Development, Deborah B. Sedwick, Commissioner
Alaska Industrial Development and Export Authority, Alaska Energy Authority, Robert Poe, Jr., Executive Director
Alaska Department of Environmental Conservation, Michele Brown, Commissioner
Alaska Department of Fish and Game, Frank Rue, Commissioner
Alaska Department of Natural Resources, Division of Mining and Water Management, Pat Pourchot, Commissioner
Alaska Department of Transportation and Public Facilities, Joseph L. Perkins, Commissioner, in cooperation with the U.S. Department of Transportation, Federal Highway Administration
Central Council of Tlingit and Haida Indian Tribes of Alaska, Desiree Welch, Native Lands and Resources Manager
City and Borough of Juneau, Sally Smith, Mayor
City and Borough of Sitka, Valorie Nelson, Mayor
City and Borough of Yakutat, Tom Maloney, Mayor
City of Klawock, Donna Williams, Mayor
City of Wrangell, Fern Neimeyer, Mayor
Alaska Native Tribal Health Consortium, Paul Sherry, President/CEO
Haida Corporation, John Bruns, Resource Manager
Kenai Peninsula Borough, Dale Bagley, Mayor
Municipality of Anchorage, George Wuerch, Mayor
University of Alaska Southeast, John Pugh, Chancellor

The following Federal agencies assisted in the data-collection program by providing funds or services:

U.S. Army Corps of Engineers
U.S. Army Corps of Engineers, Cold Regions Research & Engineering Laboratory
U.S. Department of Agriculture, Forest Service
U.S. Department of the Interior, Bureau of Land Management
U.S. Department of the Interior, National Park Service

ACKNOWLEDGMENTS

Assisting in the collection of the data were the following gage observers:

John Borg, Yukon River at Eagle
Rob Gieck, Sagavanirktok River Tributary near Pump Station 3
Sandy Hamilton, Nation and Kandik Rivers near Nation, and Kobuk River near Kiana
Vince Harkey, Ophir Creek near Yakutat
Dick Levitt, Kahtaheena River near Gustavus
John Martinisko, Ikalukrok River below Red Dog Creek near Kivalina
Brian Omann, Sawmill Creek and Blue Lake near Sitka
Steve Paustian, Kadashan River near Tenakee
Alan Peck, Moody Creek near Aleknagik
Lorry Schuerch, Kobuk River near Kiana
Eric Sundberg, Greens Creek at Greens Creek Mine near Juneau
Bob Walworth, Tatalina River near Takotna
Jennifer Williams, Indian River sites near Sitka
Ray Williams, Iliamna River near Pedro Bay

Organizations that supplied data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS

Surface Water

Alaska contains more than 40 percent of the Nation's surface-water resources. The highest runoff rates per unit area are in southeast Alaska and in other areas influenced by the maritime climate of the northern Pacific Ocean and the Gulf of Alaska. In the interior and northern parts of the State, runoff rates are markedly lower than in the maritime-influenced areas. Runoff generally increases with altitude throughout the State, and year-to-year runoff variability increases from south to north.

Seasonal runoff characteristics differ from southern to northern Alaska. Areas influenced by maritime climates usually have two periods with high runoff: a spring snowmelt period and a fall rain-fall period. High water can occur throughout the year, but the highest instantaneous peak discharges are more prevalent in the fall months; low-water periods usually occur in late spring and mid-summer, prior to the rainy fall period. Farther north, most of the total runoff and floods occur in the period from May through September; low-flow periods usually occur during late winter, shortly before spring snowmelt.

Streamflow in Alaska was dominated more by temperatures during water year 2001 than by rain-fall. No maximum peak-of-record streamflows were observed at any continuous or partial-record long-term (10 or more years) streamflow gaging station during water year 2001. However, higher than normal streamflows occurred from Wrangell to Deadhorse during the fall and winter of 2000-2001 when most of the state experienced significantly warmer temperatures. A cold spell in May and early June caused delayed snowmelt peaks, but warmer than average temperatures in mid June resulted in rapid melting and overall above average streamflow in June. Streamflow was generally above normal for the remainder of the water year throughout Alaska, though 13 continuous streamflow gaging stations recorded deficit flow (monthly mean streamflow equaled or exceeded more than 75 percent of the time) during July through September.

Record monthly mean streamflow that occurred during September 2000 (previous water year) continued during October at Yukon River at Eagle (station 15356000) and Tanana River at Nenana (station 15515500). Streamflow generally remained high through the fall. During January, average monthly temperatures were as much as 20 degrees Fahrenheit above normal, averaging 8.5 degrees above normal in Southeast, 12.6 degrees above normal in Cook Inlet, and 18.2 degrees above normal in the Yukon basin. More than 80 percent of the continuous streamflow gaging stations having 10 or more years of record recorded excessive monthly mean streamflows (streamflows equaled or exceeded less than 25 percent of the time). Yukon River at Eagle recorded the highest monthly mean streamflows of record (51 years) during October, December, and January. A few partial-record stations in Southcentral Alaska recorded annual peaks during winter. Fritz Creek near Homer (station 15239500) recorded an annual peak in January for the first time in 39 years of record.

Spring temperatures in Southeast Alaska were near or slightly below normal during April and May. Precipitation, generally snowfall at higher elevations, was below normal in April, above normal in May. Resulting streamflow was deficient at 10 of 19 stations in Southeast Alaska during April.

During May, cold temperatures throughout the state resulted in deficit streamflow at more than half the continuous streamflow gaging stations having 10 or more years of record. Rapid warming and

clear, sunny days in June resulted in 20 of 55 sites recording excessive streamflow, although precipitation was generally below normal. Three stations, Spruce Creek near Seward (station 15238600), Sixmile Creek near Hope (station 15271000), and Tatalina River near Takotna (station 15303700) recorded the highest June monthly mean streamflow of record.

Because most of the higher than normal flows occurred during winter, annual flows were mostly near average. Only Indian River near Sitka (station 15087690) recorded record low mean annual streamflow (Indian River at Sitka, station 15087700 is affected by diversions). Indian River appeared to be out of phase with most other streams in Southeast Alaska, recording deficit flows during 5 months, even when other streams in the region were recording excessive flows. Ophir Creek near Yakutat (station 15129600) was the only streamflow gaging station to record maximum annual mean streamflow for the period of record.

Ground Water

Alaska's vast area and small population preclude a comprehensive evaluation of its ground-water resources. Throughout much of the State, aquifers are poorly defined. In many areas, wells have not been drilled and little is known about seasonal and long-term changes in ground-water storage. During water year 2001, the long-term monitoring of water levels in one well in Juneau, one well in Anchorage, and three wells in Fairbanks continued. Water levels were also measured intermittently in 32 wells in Juneau for studies of the interaction between ground water and water in anadromous fish streams.

Water levels in the long-term monitoring wells in Juneau, Anchorage, and Fairbanks were within the range of historical values. Water levels in wells in the Duck and Jordan Creek watersheds in Juneau were closely related to the infiltration of rain and snowmelt and the level of water in nearby streams. Some of these wells are in stream channels or on flood plains and are intermittently flooded; most water levels in these wells were within 10 feet of land surface.

Water Quality

General Overview

Information on the concentration and composition of constituents in Alaska's surface water is markedly variable in coverage. Some subregions have had regular or periodic sampling for many years at many stream points and at a number of lakes. Information in other subregions consists of only a few miscellaneous samples. Although the chemical characteristics of water in the streams and lakes of Alaska seem variable, the ranges in concentration are not as great as those found in the conterminous United States. Most Alaskan streams above tidal reaches contain water of a calcium bicarbonate type, generally containing less than 200 mg/L dissolved solids. In these streams, the hardness generally increases with increased dissolved-solids content. The streams draining lowlands and intermontane basins usually contain harder water than the streams in the higher mountains. Some streams, especially those draining areas overlain by organic-rich deposits, can have excessive iron content.

In Alaska, the mineral content of water in lakes is more variable than that in rivers. The water in some mountain lakes is very low in dissolved-solids content and is little more concentrated than rainwater. Other lakes occupying lowlands near the sea, including many near the Arctic coastal plain, have become mineralized periodically by salts brought in from the sea either by overland flooding during storms or as ocean spray. The water in lakes in the lowlands remote from the sea is commonly very similar in chemical character to water in the larger rivers adjacent to them.

The character and distribution of suspended sediment are relatively complex in Alaska because glaciers contribute large amounts of very fine material (glacial flour) to many streams. In general, during the summer, suspended-sediment concentrations in nonglacial streams seldom exceed 100 mg/L, but can be greater than 2,000 mg/L for glacial streams. Nonglacial streams often transport the highest sediment loads during the spring breakup or during periods of high rainfall, whereas glacial streams transport the greatest sediment loads during periods of maximum glacial melting, usually in middle or late summer. The normal suspended-sediment concentration between January and April is usually less than 20 mg/L for most nonurban streams. Thus, less than 15 percent of the annual suspended-sediment load is carried during this period. The percentage of material finer than 0.062 millimeter (the silt-clay fraction as generally defined) transported by nonglacial streams is less than 50 percent in contrast to more than 50 percent for glacial streams.

Outside of the major urban areas, almost all ground water is obtained from unconsolidated aquifers. Most sampled water contains less than the State's recommended limit of 500 mg/L dissolved solids. Calcium and magnesium, which along with bicarbonate contribute to the hardness of water, are the major dissolved ions. In most wells, hardness concentrations are about 60 to 80 percent of dissolved-solids concentrations. Water of sodium bicarbonate or sodium chloride type is present in numerous community wells drilled near the coast.

Iron is present in high concentrations in a large number of shallow wells in most areas of the State. Concentrations in excess of 1.0 mg/L are common. Iron concentrations of more than about 0.3 mg/L can cause staining of laundry and plumbing fixtures and impart an unpleasant taste to the water.

The bedrock aquifers in most of Alaska are undeveloped and very little is known about their water quality. In general, the concentration of dissolved solids in water from bedrock aquifers is higher than that found in the unconsolidated aquifers and the chemical quality of water in bedrock aquifers is more variable.

Most of the State's ground-water resources have, for the present, been unaffected by humans. However, in the major urban areas and in some outlying villages, ground-water quality has been locally degraded, primarily from septic systems, landfills, and abandoned fuel storage tanks. Most ground-water contamination problems in Alaska are caused by petroleum products, primarily from leaky fuel tanks.

In 2001, the following sites were sampled for water quality as part of the National Water Quality Assessment Program (NAWQA): samples were collected at six stream-gaging stations in the Cook Inlet Basin nearly every month; and samples were collected at 4 sites on streams within the Municipality of Anchorage. As part of the Clean Water Action Plan, water-quality, and bed-material samples were collected at sites in Katmai, and Lake Clark National Parks and Preserves, and Sitka National Historical Park.

In 2001 sampling at 5 stations in the Yukon Basin started as part of the National Stream-Quality Assessment Program (NASQAN), the first year of a five year monitoring program. The Alaska District is also collecting samples for personnel from the National Research Program to help extend the normal NASQAN data.

Water-quality sampling is also done for projects throughout Alaska. The analyses for these samples are published in reports discussing these projects. For more information on reports published in 2001, contact the Chief, Water Resources Office (see p. ii) or the Alaska Water Resources Office webpage at <http://ak.water.usgs.gov>.

Remark Codes

The following remark codes may appear with the water-quality data in this section:

PRINTED OUTPUT	REMARK
E	Value is estimated.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
M	Presence of material verified, but not quantified.
N	Presumptive evidence of presence of material.
U	Material specifically analyzed for, but not detected.
A	Value is an average.
V	Analyte was detected in both the environmental sample and the associated blanks.
S	Most probable value.

Dissolved Trace-Element Concentrations

Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter ($\mu\text{g/L}$) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's and 100's of nanograms per liter (ng/L). Present data above the $\mu\text{g/L}$ level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes. However, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey began using new trace-element protocols at some stations in water year 1994. Full implementation of the protocols took place during the 1995 water year.

Quality-control data

Data generated from quality-control (QC) samples are a requisite for evaluating the quality of the sampling and processing techniques as well as data from the actual samples themselves. Without QC data, environmental sample data cannot be adequately interpreted because the errors associated

with the sample data are unknown. The various types of QC samples collected by this District are described in the following section. Procedures have been established for the storage of water-quality-control data within the USGS. These procedures allow for storage of all derived QC data and are identified so that they can be related to corresponding environmental samples.

BLANK SAMPLES – blank samples are collected and analyzed to ensure that environmental samples have not been contaminated by the overall data-collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analytes of interest. Any measured value signal in a blank samples for an analyte (a specific component measured in a chemical analysis) that was absent in the blank solution is believed to be due to contamination. There are many types of blank samples possible, each designed to segregate a different part of the overall data-collection process. The types of blank samples collected in this District are:

Source solution blank – a blank solution that is transferred to a sample bottle in an area of the office laboratory with an atmosphere that is relatively clean and protected with respect to target analytes.

Ambient blank – a blank solution that is put in the same type of bottle used for an environmental sample, kept with the set of sample bottles before sample collection, and opened at the site and exposed to the ambient conditions.

Field blank – a blank solution that is subjected to all aspects of sample collection, field processing preservation, transportation, and laboratory handling as an environmental sample.

Trip blank – a blank solution that is put in the same type of bottle used for an environmental sample and kept with the set of sample bottles before and after sample collection.

Equipment blank – a blank solution that is processed through all equipment used for collecting and processing an environmental sample (similar to a field blank but normally done in the more controlled conditions of the office.)

Sampler blank – a blank solution that is poured or pumped through the same field sampler used for collecting an environmental sample.

Pump blank – a blank solution that is processed through the same pump-and-tubing system used for an environmental sample.

Standpipe blank – a blank solution that is poured from the containment vessel (stand-pipe) before the pump is inserted to obtain the pump blank.

Filter blank – a blank solution that is filtered in the same manner and through the same filter apparatus used for an environmental sample.

Splitter blank - a blank solution that is mixed and separated using a field splitter in the same manner and through the same apparatus used for an environmental sample.

Preservation blank – a blank solution that is treated with the sampler preservatives used for an environmental sample.

Canister blank – a blank solution that is taken directly from a stainless steel canister just before the VOC sampler is submerged to obtain a field blank sample.

REFERENCE SAMPLES – Reference material is a solution or material prepared by a laboratory whose composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are submitted for analysis to ensure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental sample properties.

REPLICATE SAMPLES– Replicate samples are a set of environmental samples collected in a manner such that the samples are thought to be essentially identical in composition. Replicate is the general case for which a duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. There are many types of replicate samples possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples collected in this district are:

Concurrent sample – a type of replicate sample in which the samples are collected simultaneously with two or more samplers or by using one sampler and alternating collection of samples into two or more compositing containers.

Sequential sample – a type of replicate sample in which the samples are collected one after the other, typically over a short time.

Split sample – a type of replicate sample in which a sample is split into subsamples contemporaneous in time and space.

SPIKE SAMPLES – Spike samples are samples to which known quantities of a solution with one or more well-established analyte concentrations have been added. These samples are analyzed to determine the extent of matrix interference or degradation on the analyte concentration during sample processing and analysis.

Concurrent sample – a type of spike sample that is collected at the same time with the same sampling and compositing devices then spiked with the same spike solution containing laboratory-certified concentrations of selected analytes.

Split sample – a type of spike sample in which a sample is split into subsamples contemporaneous in time and space then spiked with the same spike solution containing laboratory-certified concentrations of selected analytes.

Water Use

Water use in the broad sense deals with man's interaction with and influence on the hydrologic cycle. In a technical sense, water use refers to water that is actually used for a specific purpose, such as domestic use, commercial needs, or industrial processing. The water use for the state of Alaska was estimated for 1995. An estimate of water use for 2000 is underway.

Industry is the largest user of fresh water in Alaska. In 1995, it accounted for about 38 percent of all offstream withdrawals. In 1995, water used instream for hydroelectric power generation was nine times more than that used offstream by man.

Another probable large instream use is for fish and wildlife resources. Approximately 15,000 water bodies have been identified by the Alaska Department of Fish and Game as producing anadromous fish. The Alaska Water Use Act was amended in 1980 to include instream flow as a use. The amendments provide the opportunity for private individuals, and local, State, and Federal governments to legally acquire instream flow water rights. Either one or a combination of the four following types of uses can be acquired: 1) protection of fish and wildlife habitat, migration, and propagation; 2) recreation and parks; 3) navigation and transportation; and 4) sanitation and water quality. Eleven instream flow rights applications have been granted.

From 1990-2001, Alaska's population increased 15 percent, which was one of the Nation's larger percentage increases. In 2001, Alaska's population increased by 1 percent. In 2001, about 60 percent of the State's population lived in the Anchorage, Fairbanks, and Juneau areas.

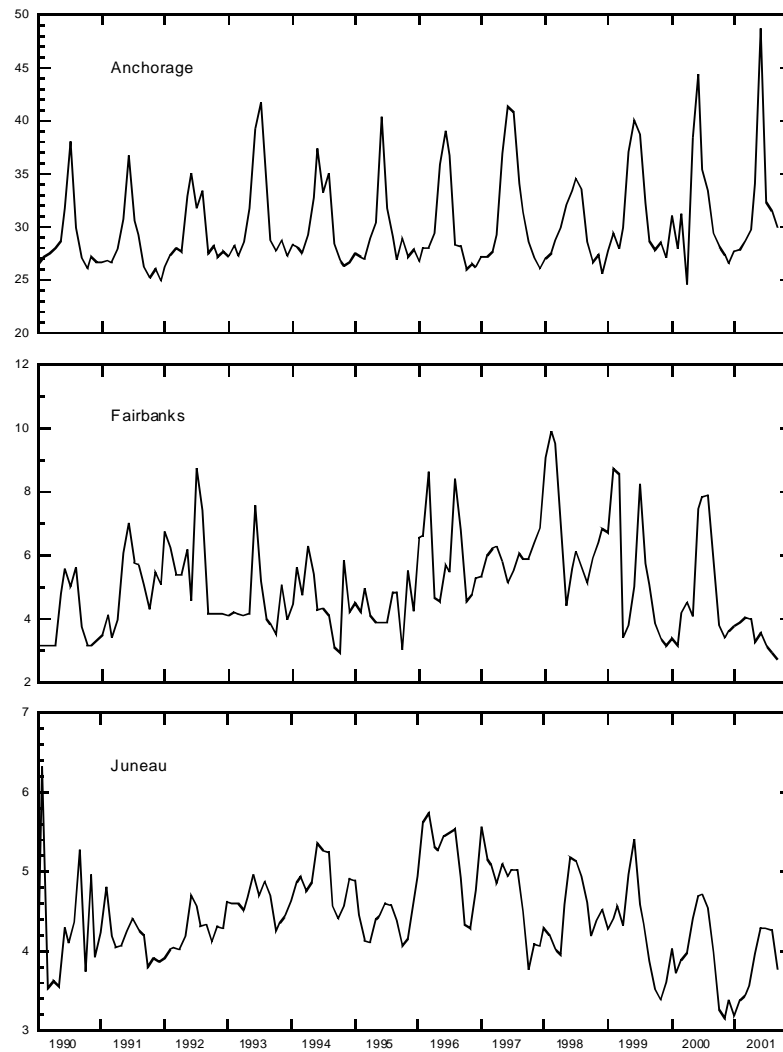
Because of the population increase, public-supply use of water is also increasing. In 1995, public-supply use accounted for 33 percent of all offstream withdrawal and 63 percent of the State's population received their water from a public-supply utility; the remainder supplied their own water. The main use of public-supply water was for domestic use of about 57 percent; the rest was primarily for commercial and industrial uses which has dropped since 1990 due to timber processing plants closing in southeast Alaska and changes in the fish processing industry.

In 1995, the water utilities in the Anchorage, Fairbanks, and Juneau areas used 60 percent of all water withdrawn in the State for public supply. The monthly mean rate of water withdrawn by the principal public-supply utilities servicing these three areas from January 1990 to September 2001 is shown in figure 1. (Data are from Municipality of Anchorage, Fort Richardson, City of Fairbanks, and City and Borough of Juneau.) The higher usage shown during the summer months in Anchorage and Fairbanks is probably due to tourism and other commercial activity, increased industrial activity, and seasonal climatic effects.

The State's 1995 average use from public supply was 172 gallons per day per person, while the nation's average is 184 gallons per day. One of the nation's lowest per capita use of all public-supply customers of 10 gallons per day has been reported on the North Slope.

Surface water is the source for around 60 percent of the 2001 State's public-water supply in these three cities, while ground water is the source for the remainder. Anchorage receives 81 percent of its water from surface-water sources. Surface water became the primary source when water from Eklutna Lake was brought into production in 1988. Juneau obtained 72 percent of public-supply water from ground-water sources in 2001. Juneau has reduced using its surface-water source because of cost to meet water-quality regulations. Fairbanks obtains 100 percent of public-supply water from ground-water sources. Of the water withdrawn in Fairbanks, about two-thirds is treated to be suitable for domestic use, and the other one-third is for thermoelectric power use.

MONTHLY MEAN WATER WITHDRAWAL RATE, MILLION GALLONS PER DAY



Monthly mean water withdrawal rate for public supply in the Anchorage, Fairbanks, and Juneau area, 1990 to 2001.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Benchmark Network is a network of 50 sites in small drainage basins around the country whose purpose is to provide consistent data on the streamflow representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by human activities. At 10 of these sites, water-quality information is being gathered on major ions and nutrients, primarily to assess the affects of acid deposition on stream chemistry. Additional information on the Hydrologic Benchmark Program can be found at <http://water.usgs.gov/hbn/>.

International Gaging Station Network is a network of stations located on the boundary waters between Canada or Mexico and the United States. The stations are officially designated as “International” by joint action of the two countries to provide data pursuant to an international agreement, understanding, or other mutually agreed purposes. Operation of the gaging stations may be by water monitoring agencies of either country, or jointly. Data must be collected and analyzed in a mutually satisfactory manner according to agreed procedures and be available to users in both countries.

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within the Nation’s largest river basins. From 1995 through 1999, a network of approximately 40 stations were operated in the Mississippi, Columbia, Colorado, and Rio Grande. From 2000 through 2004, sampling was reduced to a few index stations on the Colorado and Columbia so that a network of 5 stations could be implemented on the Yukon River. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment Program (NAWQA); (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world’s oceans and for determining global cycles of carbon, nutrients, and other chemicals. Additional information about the NASQAN Program can be found at <http://water.usgs.gov/nasqan/>.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical constituents in precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 225 precipitation chemistry monitoring sites. This long-term, nationally consistent monitoring program, coupled with ecosystem research, provides critical information toward a national scorecard to evaluate the effectiveness of ongoing and future regulations intended to reduce atmospheric emissions and subsequent impacts to the Nation’s land and water resources. Reports and other information on the NADP/NTN Program, as well as all data from the individual sites, can be found at <http://bqs.usgs.gov/acidrain/>.

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation’s ground- and surface-water resources; provide

an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 59 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents will be measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision making by water-resources managers and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest. Communication and coordination between USGS personnel and other local, State, and federal interests are critical components of the NAWQA Program. Each study unit has a local liaison committee consisting of representatives from key federal, State, and local water resources agencies, Indian nations, and universities in the study unit. Liaison committees typically meet semiannually to discuss their information needs, monitoring plans and progress, desired information products, and opportunities to collaborate efforts among the agencies. Additional information about the NAWQA Program can be found at

http://water.usgs.gov/nawqa/nawqa_home.html.

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 2001 water year that began October 1, 2000, and ended September 30, 2001. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, water-quality data for surface and ground water, and ground-water-level data. The locations of the stations and wells where the data were collected are shown in figures 1, 2 and 3. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each data station, whether stream site, lake, reservoir, spring, or well, in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for wells, lakes, reservoirs, springs, and for surface-water stations where only miscellaneous measurements and/or water-quality samples are collected.

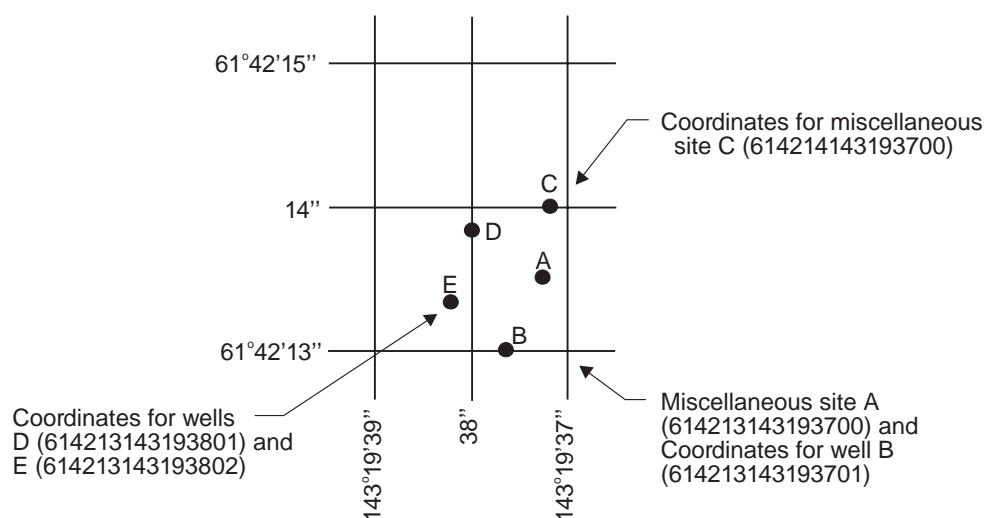
Downstream Order System

Since October 1, 1950, the order of listing hydrologic-station records in USGS reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a mainstream station are listed before that station. A station on a tributary that enters between two mainstream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary with respect to the stream to which it is immediately tributary is indicated by an indentation in the "List of Stations" in the front of this report. Each indentation represents one rank. This downstream order and system of indentation show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated. Stations located on islands in Alaska are in downstream order starting at the most westerly point on the island and moving around the island in a counter-clockwise direction (stations on Kodiak Island start at the most northerly point).

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between regular stations and partial-record stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Water-quality stations located at or near regular stations or partial-record stations have the same number as the regular or partial-record station. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete eight-digit number for each station, such as 15303600, which appears just to the left of the station name, includes the two-digit Part number "15" plus the six-digit downstream order number "303600." The Part number designates the State of Alaska. Occasionally, the downstream order number consists of eight digits.

Latitude-Longitude System

The identification numbers for miscellaneous surface-water sites, wells, springs, lakes, and reservoirs are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. This site-identification number, once assigned, is a pure number, and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description and also stored in the computerized data base files. See the accompanying diagram.



Local Number

The local number, which is assigned to well and spring sites, is derived in part from the rectangular subdivision of public lands and is used in Alaska as the site name. The first two letters indicate the principal meridian and the quadrant formed by the intersection of the base line and the principal meridian. The first three digits indicate the township in which the well or spring is located, the next three digits the range, and the last two digits the section. The letters following the section number indicate the quarter section, the quarter-quarter section, and so forth to the fourth order subdivision. Each of these subdivisions is lettered counter-clockwise, from the northeast corner. Each site within the smallest order of subdivision is then given a sequential number. Finally, each well within a section is assigned a sequential map number indicated by the last three digits. Thus, SB00601115BCAD1 001 denotes the Seward meridian (S), the northwest quadrant (B), township 6 north, range 11 west, section 15; and the site is in the SE $\frac{1}{4}$ of NE $\frac{1}{4}$ of the SW $\frac{1}{4}$ of the NW $\frac{1}{4}$ (BCAD) of the section. It was the first site in the 2.5 acre "D" subdivision assigned a sequential number (1). The next space is left blank. The next three digits, 001, indicate the sequence in which a site was located on a map. Thus, 001 indicates the first site plotted in the one-square-mile section. The next space is left blank. The last five digits, such as 00114, are the Alaska (AK) register number. Therefore, the local number is SB00601115BCAD1 001 00114. The local number for springs

is the same, except for the last three digits and the Alaska (AK) register number, as indicated by the following example: SB00601115BCAD1S 4065S. Note: Public-land surveys have not been completed for a large portion of Alaska, therefore, some "local numbers" reflect this in an abbreviated form, e.g., SB00601115.

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those at which daily mean discharges can be computed or estimated with reasonable accuracy from the supporting data and information. Because the daily mean discharges commonly are published, the stations are referred to as "daily stations."

By contrast, partial records are obtained through discrete measurements and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as "Crest-stage partial records" or "Low-flow partial records." Records of miscellaneous discharge measurements or from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report. Periodic lake-level measurements are also presented separately. Locations of all complete-record and crest-stage partial record stations for which data are given in this report are shown in figures 2 and 3, respectively.

Data Collection and Computation

Methodology

The base data collected at gaging stations consist of stage records and discharge measurements of streams, and stage of lakes. In addition, observations of factors affecting the stage-discharge relation, weather records, and other information are used to supplement base data in determining the daily flow. Records of stage are obtained from direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations, a tape punched at selected time intervals, or an electronic data logger. Measurements of discharge are made with a current meter, using the general methods adopted by the U.S. Geological Survey. These methods are described in standard textbooks, in U.S. Geological Survey Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water Resources Investigations, Book 3, Chapter A6.

Computation

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using: (1) logarithmic plotting; (2) results of indirect measurements of peak discharge, such as slope-area or flow-through-culvert measurements and computations of flow-over-dams or weirs; (3) step-backwater techniques; or (4) velocity-area studies.

Daily mean discharges are computed by applying the daily mean stages (gage heights) to the stage-discharge curves or tables. If the stage-discharge relation is subject to change because of frequent

or continual change in the physical features that form the control, the daily mean discharge is determined by shifting control method, in which correction factors based on the individual discharge measurements and notes of the person who made the measurement are added (or subtracted) to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of debris or aquatic growth on the control.

In computing records of reservoir contents, it is necessary to have curves or tables defining the relation of stage and contents (from prior survey and computations). The application of stage to stage-content curves or tables gives the contents from which daily, monthly, or yearly changes can be determined. Discharges over lake or reservoir spillways are computed from stage-discharge relations much as other stream discharges are computed. Discharge through hydro-power plants can be calculated indirectly by using the theoretical relation of flow-rates with the amount of power being generated by each turbine, the reservoir level, and the estimated efficiency of each turbine. It is necessary to have tables, curves, or formulas relating the above variables (usually supplied by the manufacturer of the turbine). It is also necessary to have records of reservoir elevation, either from periodic observations or continuous records, and power-generation records (usually furnished by the operators of the power plant).

Winter discharge measurements

At most stream-gaging stations in Alaska, the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed or estimated on the basis of the available gage-height record and occasional winter discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrographers, and comparable records of discharge for other stations in the same or nearby basins. Determinations of 0.0 or no flow may indicate a lack of distinguishable velocity, but do not necessarily describe a dewatered channel.

Estimates for periods of no data

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge. This happens when the recorder is stopped for the winter or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections, "Data Presentation" ("REMARKS" paragraph) and "Identifying Estimated Daily Discharge."

Data Presentation

Streamflow data in this report are presented in a format that is considerably different from the format in data reports prior to the 1991 water year. The major changes are that statistical characteristics of discharge now appear in tabular summaries following the water-year data table and less information is provided in the text or station manuscript above the table. These changes represent

the results of a pilot program to reformat the annual water-data report to meet current user needs and data presentation.

The records published for each continuous-record surface-water discharge station (gaging station) now consist of four parts: the manuscript or station description; the data table of daily mean values of discharge for the current water year with summary data; a tabular statistical summary of monthly mean flow data for a designated period, by water year; and a summary statistics table that includes statistical data of annual, daily, and instantaneous flows as well as data pertaining to annual runoff, 7-day low-flow minimum, and flow duration. Occasionally, data for other than the current year are published, usually to present unpublished data.

Station manuscript

The manuscript provides, under various headings, descriptive information, such as location of station; drainage area; period of record; record accuracy; and other remarks pertinent to station operation and regulation. For some stations, historical extremes outside the period of record and peak discharges greater than base discharge for the station are given. The following information, as appropriate, is provided with each continuous record of discharge, stage, or reservoir contents. Comments to clarify information presented under the various headings of the station description follow:

LOCATION.--Information on locations is obtained from the most accurate maps available. The USGS topographic map showing the location of the station is included in parentheses for many sites, e.g. (Livengood E-1). The location of the gage with respect to the cultural and physical features nearby and to the reference place mentioned in the station name is given.

DRAINAGE AREA.--Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another or because of difficulties in determining drainage boundaries, the accuracy of drainage-area determinations likewise varies. As appropriate, some drainage-area figures are qualified by "approximately." Drainage areas are updated as better maps become available.

PERIOD OF RECORD.--This indicates the period for which published records are available for the station or for an equivalent station. An equivalent station is one that was in operation at a time the present station was not, and whose location was such that records from it can be considered reasonably equivalent with records from the current station. Some daily stations were previously operated as partial-record stations or had only monthly discharge records published. These periods are included in the paragraph.

REVISED RECORDS.--Published records occasionally are found to be incorrect, usually because of new information, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual discharge figures, that fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given.

GAGE.--The type of gage in current use, the datum of the current gage referred to sea level (see "Definition of Terms"), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.--Periods of estimated daily discharge will be identified by date in this paragraph for selected stations. For all stations, estimated daily discharge will be flagged in the daily discharge table. (See next section "Identifying Estimated Daily Discharge.") If a REMARKS paragraph is used to identify estimated record, this information would be the first entry. This paragraph is also used to present information relative to the accuracy of the records, to the special methods of computation, to conditions that affect natural flow at the station, and to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose (use) of the reservoir.

COOPERATION.--Records provided by a cooperating organization or obtained for the U.S. Geological Survey by a cooperating organization are identified here. Also, if data or information are supplied which aid in the computation of the record, the agency providing the information is named.

EXTREMES FOR PERIOD OF RECORD.--This paragraph is included in the station manuscript for stations for which tabular summary statistics are not appropriate because they have short records, seasonal records, or regulated flow.

EXTREMES OUTSIDE PERIOD OF RECORD.--Information about floods or unusually low flows that have occurred outside the stated period of record is included. The information may or may not have been obtained by the U.S. Geological Survey.

EXTREMES FOR CURRENT YEAR or EXTREMES FOR CURRENT PERIOD.--This paragraph is included in the station manuscript for selected sites where peaks above base discharge are published and for stations for which tabular summary statistics are not appropriate because they have short records, seasonal records, or regulated flow. For records that meet certain criteria, all peak discharges and stages greater than a selected base discharge during the water year are given. The peaks greater than the base discharge, excluding the highest one, are called secondary peaks. The time that the peak occurred is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030 and 1:30 p.m. is 1330. Except for stations for which tabular summary statistics are not appropriate, the maximum and minimum for the current water year appears below the daily values table in the tabular summaries.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, occasionally the records of a discontinued gaging station may need revision. For these stations, there may be no current or, possibly, future station manuscript published to document the revision in a "Revised Records" entry; users of data for these stations who obtained the record for previously published data reports may wish to contact the District Office (address given on the back of the title page of this report) to determine if the published records were ever revised after the station was discontinued. If the data for a discontinued station were obtained by computer

retrieval, the data would be current because any previously published data are automatically accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the "Remarks" and in the inclusion of a skeleton stage-capacity table when daily contents are given.

Headings that appeared in reports before water year 1991 for AVERAGE DISCHARGE, EXTREMES FOR PERIOD OF RECORD, and EXTREMES FOR CURRENT YEAR have been deleted and the information contained in these paragraphs, except for the listing of secondary instantaneous peak discharges in the EXTREMES FOR CURRENT YEAR paragraph, is now presented in the tabular summaries following the discharge table or in the REMARKS paragraph, as appropriate, except for stations for which tabular summary statistics are not appropriate. No changes have been made to the data presentation of lake contents.

Data table of daily mean values

The daily table of discharge records for stream-gaging stations gives the mean discharge for each day of the water year. In the monthly summary for the daily table, the line headed "TOTAL" gives the sum of the daily figures for each month; the line headed "MEAN" gives the average flow in cubic feet per second for the month; and the lines headed "MAX" and "MIN" give the maximum and minimum daily mean discharges, respectively, for each month. Discharge for the month also may be expressed in acre-feet (line headed "AC-FT"), in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the contributing drainage area or boundaries are unknown, or if the flow is mostly from a spring. At some stations, monthly and (or) yearly discharges are adjusted for diversions or changes in reservoir contents.

Statistics of monthly mean data

A tabular summary of the mean (line headed "MEAN"), maximum (line headed "MAX"), and minimum (line headed "MIN") of monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those figures. The designated period will be expressed as "FOR WATER YEARS ____ - ____, BY WATER YEAR (WY)," and will list the first and last water years of the range of years selected from the PERIOD OF RECORD paragraph in the station manuscript. It will consist of all the station records within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript.

Summary statistics

A table titled "SUMMARY STATISTICS" follows the statistics of monthly mean data tabulation. This table consists of four columns, with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a desig-

nated period, as appropriate. The designated period selected, "WATER YEARS ____ - ____" will consist of all of the station records within the specific water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (see line headings below), except for the "ANNUAL 7-DAY MINIMUM" statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the REMARKS paragraph of the manuscript or in footnotes. Because the designated period may not be the same as the station period of record published in the manuscript, occasionally the dates of occurrence listed for the daily and instantaneous extremes in the designated-period column may not be within the selected water years listed in the heading. When this occurs, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration curve statistics and runoff data are also given. Runoff data may be omitted if there is extensive regulation or diversion of flow in the drainage basin.

The following summary statistics data, as appropriate, are provided with each continuous record of discharge. The comments clarify information presented under the various line headings of the summary statistics table.

ANNUAL TOTAL.--The sum of the daily mean values of discharge for the year. At some stations, the annual total discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

ANNUAL MEAN.--The arithmetic mean of the individual daily mean discharges for the year noted or for the designated period. At some stations, the annual mean discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

HIGHEST ANNUAL MEAN.--The maximum annual mean discharge occurring for the designated period.

LOWEST ANNUAL MEAN.--The minimum annual mean discharge occurring for the designated period.

HIGHEST DAILY MEAN.--The maximum daily mean discharge for the year or for the designated period.

LOWEST DAILY MEAN.--The minimum daily mean discharge for the year or for the designated period.

ANNUAL 7-DAY MINIMUM.--The lowest mean discharge for consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1 - March 31). The date shown in the summary statistics table is the initial

date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

MAXIMUM PEAK FLOW.--The maximum instantaneous discharge occurring for the water year or for the designated period. Note that secondary instantaneous peak discharges above a selected base discharge are stored in District computer files for stations meeting certain criteria. Those discharge values may be obtained by contacting the District Office. (See address on the back of the title page.)

MAXIMUM PEAK STAGE.--The maximum instantaneous stage occurring for the water year or for the designated period. If the dates of occurrence for the instantaneous peak flow and instantaneous peak stage differ, footnotes may be used to provide further information. (For Alaska, a second line heading, **INSTANTANEOUS PEAK STAGE**, is used for stations where the peak stage was from a backwater condition and had a different date from the peak discharge.)

INSTANTANEOUS LOW FLOW.--The minimum instantaneous discharge occurring for the water year or for the designated period.

ANNUAL RUNOFF.--Indicates the total quantity of water in runoff for a drainage area for the year. Data reports may use any of the following units of measurement in presenting annual runoff data:

Acre-foot (AC-FT) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equal to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile area drained, assuming the runoff is distributed uniformly in time and area.

Inches (INCHES) indicates the depth to which the drainage area would be covered if all of the runoff for a given time period were uniformly distributed on it.

10 PERCENT EXCEEDS.--The discharge that has been exceeded 10 percent of the time for the designated period.

50 PERCENT EXCEEDS.--The discharge that has been exceeded 50 percent of the time for the designated period.

90 PERCENT EXCEEDS.--The discharge that has been exceeded 90 percent of the time for the designated period.

Data collected at partial-record stations follow the information for continuous-record sites. In prior years, data for low-flow partial-record stations have been published, but no stations were in operation in the current water year. Data are presented in two tables. The first is a table of annual maximum stage and discharge at crest-stage partial-record stations. The second is a table of discharge measurements made at crest-stage partial-record stations and miscellaneous sites. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage

gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are given in special tables following the listing of miscellaneous measurements. Lake-level data collected at miscellaneous selected lakes are included. The data are being collected at these selected lakes to define lake-level changes in response to seasonal variations, the effects of man, droughts, and changes in the ground-water system. The lake-level data follow the water-quality data tables for miscellaneous sites.

Identifying Estimated Daily Discharge

Estimated daily-discharge values in the current annual data report are identified by the "e" notation next to each mean daily discharge in the daily values tables. Prior to the report for the 1985 water year, estimated daily-discharge values were not specifically identified.

Accuracy of the Records

The accuracy of streamflow data depends primarily on: (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements; and (2) the accuracy of observations of stage, measurements of discharge, and interpretations of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent of the true value; "good" within 10 percent; and "fair" within 15 percent. Records are rated as "poor" when they do not meet the criteria above. Different accuracies may be attributed to different parts of a given record.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft³/s; to the nearest tenth between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures above 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous measurement sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, flow from springs, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions or for other factors that might affect the flows. At those stations where adjustments are made, large errors in computed runoff may occur if adjustments are large in comparison to observed discharge. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents.

Other Data Available

Information of a more detailed nature than that published for most of the gaging stations such as observations of water temperatures, discharge measurements, gage-height records, and rating tables, is filed in the field offices at Anchorage, Fairbanks, and Juneau for their areas of responsibility. Also, most of the daily mean discharges are in computer files and can be retrieved for statistical analyses. Information on the availability of unpublished data or statistical analyses may be obtained from the District Office in Anchorage.

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report involve a variety of types of data and measurement frequencies.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station, where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

A distinction needs to be made between “continuing records” as used in this report and “continuous recordings,” which refers to a continuous graph or a series of discrete values recorded at short intervals. Some records of water quality, such as temperature and specific conductance, may be obtained by continuous recordings; however, because of costs, most data are obtained only monthly or less frequently.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

On-Site Measurements and Sample Collection

To assure the data obtained represent the *in situ* quality of the water, certain measurements, such as water temperature, pH, alkalinity, and dissolved oxygen, are made onsite when the samples are collected. To assure that measurements made in the laboratory also represent the *in situ* water, prescribed procedures are followed in collecting, treating, and shipping the samples to prevent changes in quality pending analysis in the laboratory. These procedures are given in U.S. Geological Survey Techniques of Water-Resources Investigations, Book 1, Chapter D2; Book 3, Chapter C2; Book 5, Chapters A1, A3, and A4.

One sample can adequately define the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, de-

pending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. For the tables of surface-water quality that are published in this report, parameter code 82398 (SAMPLING METHOD, CODES) lists a numeric value which corresponds to the following explanation:

- 10 - Equal width increment (EWI)
- 20 - Equal discharge increment (EDI)
- 25 - Timed sampling interval
- 30 - Single vertical
- 40 - Multiple verticals
- 50 - Point sample
- 60 - Weighted bottle
- 70 - Grab sample (dip)
- 80 - Discharge integrated, equal transit rate (ETR)
- 90 - Discharge integrated, centroid
- 100 - Van Dorn sampler
- 110 - Sewage sampler
- 120 - Velocity integrated
- 8010 - Other

To better define the sample, parameter code 84164 (SAMPLER TYPE) lists a numeric value which corresponds to the following explanation:

- | | |
|---------------------------|--|
| 100 - Van Dorn sampler | 3045 - US DH -81 with Teflon cap and nozzle |
| 110 - Sewage sampler | 3050 - Collapsible Teflon Bag in Frame Sampler |
| 3001 - Sampler, US DH-48 | 3053 - US D-95 Teflon bottle |
| 3002 - Sampler, US DH-59 | 3054 - US D-95 Teflon bottle |
| 3003 - Sampler, US DH-75P | 3055 - US D-96 Teflon bag |
| 3004 - Sampler, US DH-75Q | 3060 - Weighted Bottle Sampler |
| 3007 - Sampler, US D-49 | 3070 - Grab Sampler |
| 3009 - Sampler, US D-74 | 4020 - Open top bailer |
| 3011 - Sampler, US D-77 | 4025 - Double valve bailer |
| 3015 - Sampler, US P-63 | 4041 - Submersible Helical Rotor Pump |
| 3016 - Sampler, US P-72 | 4080 - Peristaltic pump |
| 3042 - Sampler, US P-61 | 4100 - Flowing Well |
| 3044 - US DH-81 | 8010 - Other |

For further explanation on sampling methods, see Techniques of Water-Resources Investigations, Book 3, Chapter C2, "Field Methods for Measurement of Fluvial Sediment."

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is

the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are sometimes taken at the time of discharge measurements at water-discharge stations. Large streams have a small daily temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where temperature recording instruments are used, maximum and minimum temperatures for each day are published. Mean temperatures are published when diurnal variations are greater than 2.0 °C more than 5 percent of the water year. Water temperatures measured at the time of water-discharge measurements are on file in the District field offices.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of quantities of suspended sediment, records of periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

Laboratory Measurements

Sediment samples are analyzed in the U.S. Geological Survey laboratory in Vancouver, Washington. Methods used in analyzing sediment samples and computing sediment records are given in *Techniques of Water-Resources Investigations*, Book 5, Chapter C1. Methods used by the Geolog-

ical Survey laboratory are given in TWRI, Book 1, Chapter D2; Book 3, Chapter C2; Book 5, Chapters A1, A3, and A4.

Records of Ground-Water Levels

Ground-water level data from a statewide network of observation wells are published in this report. This network consists of observation wells (figure 3) located either in important aquifers or in areas of significant water use.

Data Collection and Computation

Water-level measurements are made in many types of wells, under varying conditions of access and weather conditions. However, the equipment and measuring techniques used at each observation well assure that the measurements are of consistent accuracy and reliability.

Tables of water-level data are presented by Hydrologic Subregion. The station-identification number for a given well is the 15-digit number that appears in the upper left corner of the station description. The secondary identification number is the local number, an alphanumeric number, derived from the township-range location of the well.

Water-level records are obtained from direct measurements with a steel tape, battery-operated electric tape, or from a water-stage recorder that gives a continuous graph of water-level fluctuations, a paper tape punched at selected time intervals, or data stored at selected time intervals on an electronic data logger. The water-level measurements in this report are given in feet with reference to either sea level or land-surface datum. Sea level is the datum plane on which the national network of precise levels is based; land-surface datum is a datum plane that is approximately at land surface at each well. The altitude of the land-surface datum is given in the well description. The height of the measuring point above or below land-surface datum is also given in each well description. Water levels in wells equipped with recording gages are the highest ground-water level recorded in the well on the day indicated.

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet and if an electric water sensor is used, the error in determining the absolute value of the total depth to water may be a few tenths of a foot. However, the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some may be given only to a tenth of a foot.

Data Presentation

Each well record consists of the station description and the data table of water levels observed during the water year. The description of the well is presented through use of descriptive headings preceding the tabular data. Clarification of each heading is given below.

LOCATION.--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds); the Hydrologic Unit; the distance and direction from a geographic point of reference; and the owner's name.

AQUIFER.--This entry designates by name (if a name exists) and geologic age the aquifer(s) open to the well.

WELL CHARACTERISTICS.--This entry describes the well in terms of depth, diameter, casing depth and/or screened interval, method of construction, and additional information such as casing breaks, collapsed screen, and other changes since construction.

INSTRUMENTATION.--This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on weekly, monthly, or some other frequency of measurement.

DATUM.--This entry describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base and so on), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above sea level; it is reported with a precision depending on the method of determination.

REMARKS.--This entry describes factors that may influence the water level in a well or the measurement of the water level. It should identify wells that also are water-quality observation wells and may be used to acknowledge the assistance of local (non-Survey) observers.

PERIOD OF RECORD.--This entry indicates the period for which there are published records for the well. It reports the month and year of the start of publication of water-level records by the U.S. Geological Survey and the words "to current year" if the records are to be continued into the following year. Periods for which water-level records are available, but are not published by the U.S. Geological Survey, may be noted.

EXTREMES FOR PERIOD OF RECORD.--This entry contains the highest and lowest water levels of the period of record, with respect to land-surface datum or sea level, and the dates of their occurrence.

A table of water levels follows the station description for each well. Water levels are reported in feet above or below land-surface datum. Water levels that are above land-surface datum have negative values. For wells equipped with recorders, water level values listed are the highest recorded in the well on the day indicated. Missing records are indicated by dashes in place of the water level.

Information of a more detailed nature than that published, such as well depths and water levels from other ground-water sites throughout the State, is filed in the Anchorage field office. Much of the data are in computer files and can be retrieved for analysis. Information on the availability of unpublished data may be obtained from the District Office in Anchorage.

Records of Ground-Water Quality

Records of ground-water quality in this report differ from other types of records in that for most sampling sites they consist of only one set of measurements for the water year. The quality of ground water ordinarily changes slowly; therefore, for most general purposes one annual sampling, or a few samples taken at infrequent intervals during the year, is sufficient. Frequent measurement of the same constituents is not necessary unless one is concerned with a particular problem, such as monitoring for trends in nitrate concentration. In special cases where the quality of ground water may change more rapidly, more frequent measurements are made to identify the nature of the changes.

Data Collection and Computation

The records of ground-water quality in this report were obtained mostly as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some areas but none for other areas. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality statewide. Such a view can be attained only by considering records for this year in context with similar records obtained for these and other areas in earlier years.

Data Presentation

The records of ground-water quality are published in a section titled QUALITY OF GROUND WATER immediately following the ground-water-level records. Data for quality of ground water are listed by Hydrologic Subregion, and are identified by well number. The station-identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. No descriptive statements are given for ground-water-quality records; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water.

ACCESS TO USGS WATER DATA

The USGS provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary telemetry and historic daily-mean and peak-flow discharge data for most current or discontinued gaging stations through the Internet. These data may be accessed at:

<http://water.usgs.gov>

Some water-quality and ground-water data also are available through the Internet. In addition, data can be provided in various machine-readable formats on magnetic tape or 3-1/2 inch floppy disk. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division District Offices (see address on the back of the title page).

DEFINITION OF TERMS

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. Terms such as algae, water level, precipitation are used in their common everyday meanings, definitions of which are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting English units to International System (SI) Units on the inside of the back cover.

Acid neutralizing capacity (ANC) is the equivalent sum of all bases or base-producing materials, solutes plus particulates, in an aqueous system that can be titrated with acid to an equivalence point. This term designates titration of an “unfiltered” sample (formerly reported as alkalinity).

Acre-foot (AC-FT, acre-ft) is a unit of volume, commonly used to measure quantities of water used or stored, equivalent to the volume of water required to cover 1 acre to a depth of 1 foot and equivalent to 43,560 cubic feet, 325,851 gallons, or 1,233 cubic meters. (See also “Annual runoff”)

Adenosine triphosphate (ATP) is an organic, phosphate-rich, compound important in the transfer of energy in organisms. Its central role in living cells makes ATP an excellent indicator of the presence of living material in water. A measurement of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Alkalinity is the capacity of solutes in an aqueous system to neutralize acid. This term designates titration of a “filtered” sample.

Annual runoff is the total quantity of water that is discharged (“runs off”) from a drainage basin in a year. Data reports may present annual runoff data as volumes in acre-feet, as discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches.

Annual 7-day minimum is the lowest mean value for any 7-consecutive-day period in a year. Annual 7-day minimum values are reported herein for the calendar year and the water year (October 1 to September 30). Most low-flow frequency analyses use a climatic year (April 1-March 31), which tends to prevent the low-flow period from being artificially split between adjacent years. The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

Aroclor is the registered trademark for a group of polychlorinated biphenyls that were manufactured by the Mon-

santo Company prior to 1976. Aroclors are assigned specific 4-digit reference numbers dependent upon molecular type and degree of substitution of the biphenyl ring hydrogen atoms by chlorine atoms. The first two digits of a numbered aroclor represent the molecular type and the last two digits represent the weight percent of the hydrogen substituted chlorine.

Artificial substrate is a device that is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection. (See also “Substrate”)

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500 °C for 1 hour. Ash mass of zooplankton and phytoplankton is expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2). (See also “Biomass”)

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, while others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Base discharge (for peak discharge) is a discharge value, determined for selected stations, above which peak discharge data are published. The base discharge at each station is selected so that an average of about three peaks per year will be published.

Base flow is sustained flow of a stream in the absence of direct runoff. It includes natural and human-induced streamflows. Natural base flow is sustained largely by ground-water discharge.

Bedload is material in transport that is supported primarily by the streambed. In this report, bedload is considered to consist of particles in transit from the bed to an elevation equal to the top of the bedload sampler nozzle (ranging from 0.25 to 0.5 ft) that are retained in the bedload sampler. A sample collected with a pressure-differential

bedload sampler may also contain a component of the suspended load.

Bedload discharge (tons per day) is rate of sediment moving as bedload, reported as dry weight, that passes through a cross section in a given time. NOTE: Bedload discharge values in this report may include a component of the suspended-sediment discharge. A correction may be necessary when computing the total sediment discharge by summing the bedload discharge and the suspended-sediment discharge. (See also “Bedload” and “Sediment”)

Bed material is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed. (See also “Bedload” and “Sediment”)

Benthic organisms are the group of organisms inhabiting the bottom of an aquatic environment. They include a number of types of organisms, such as bacteria, fungi, insect larvae and nymphs, snails, clams, and crayfish. They are useful as indicators of water quality.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as mass per unit area or volume of habitat.

Biomass pigment ratio is an indicator of the total proportion of periphyton which are autotrophic (plants). This is also called the Autotrophic Index.

Blue-green algae (*Cyanophyta*) are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample. (See also “Phytoplankton”)

Bottom material (See “Bed material”)

Cells/volume refers to the number of cells of any organism that is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample volume, and are generally reported as cells or units per milliliter (mL) or liter (L).

Cells volume (biovolume) determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell members of algae are frequently used in aquatic surveys as an indicator of algal production. However, cell numbers alone cannot represent true biomass because of considerable cell-size variation among the algal species. Cell volume (μm^3) is determined by obtaining critical cell measurements on cell dimensions (for example, length, width, height, or radius) for 20 to 50 cells of each important species to obtain an average biovolume per cell. Cells are categorized according to the correspondence of their cellular shape to the nearest geometric solid

or combinations of simple solids (for example, spheres, cones, or cylinders). Representative formulae used to compute biovolume are as follows:

$$\text{sphere } 4/3 \pi r^3 \quad \text{cone } 1/3 \pi r^2 h \quad \text{cylinder } \pi r^2 h.$$

π is the ratio of the circumference to the diameter of a circle; $\pi = 3.14159\dots$

From cell volume, total algal biomass expressed as biovolume ($\mu\text{m}^3/\text{mL}$) is thus determined by multiplying the number of cells of a given species by its average cell volume and then summing these volumes over all species.

Cfs-day (See “Cubic foot per second-day”)

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with BOD or with carbonaceous organic pollution from sewage or industrial wastes. [See also “Biochemical oxygen demand (BOD)”]

Clostridium perfringens (*C. perfringens*) is a spore-forming bacterium that is common in the feces of human and other warm-blooded animals. Clostridial spores are being used experimentally as an indicator of past fecal contamination and presence of microorganisms that are resistant to disinfection and environmental stresses. (See also “Bacteria”)

Coliphages are viruses that infect and replicate in coliform bacteria. They are indicative of sewage contamination of waters and of the survival and transport of viruses in the environment.

Color unit is produced by 1 milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Confined aquifer is a term used to describe an aquifer containing water between two relatively impermeable boundaries. The water level in a well tapping a confined aquifer stands above the top of the confined aquifer and can be higher or lower than the water table that may be present in the material above it. In some cases, the water level can rise above the ground surface, yielding a flowing well.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Continuous-record station is a site where data are collected with sufficient frequency to define daily mean values and variations within a day.

Control designates a feature in the channel downstream from a gaging station that physically influences the water-surface elevation and thereby determines the stage-discharge relation at the gage. This feature may be a constriction of the channel, a bedrock outcrop, a gravel bar, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of saltwater.

Cubic foot per second (CFS, ft³/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point in 1 second. It is equivalent to approximately 7.48 gallons per second or approximately 449 gallons per minute, or 0.02832 cubic meters per second. The term “second-feet” sometimes is used synonymously with “cubic feet per second” but is now obsolete.

Cubic foot per second-day (CFS-DAY, Cfs-day, [(ft³/s)/d]) is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.98347 acre-feet, 646,317 gallons, or 2,446.6 cubic meters. The daily-mean discharges reported in the daily-value data tables are numerically equal to the daily volumes in cfs-days, and the totals also represent volumes in cfs-days.

Cubic foot per second per square mile [CFSM, (ft³/s)/mi²] is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area. (See also “Annual runoff”)

Daily mean suspended-sediment concentration is the time-weighted concentration of suspended sediment passing a stream cross section during a 24-hour day. (See also “Mean concentration of suspended sediment,” “Sediment,” and “Suspended-sediment concentration”)

Daily-record station is a site where data are collected with sufficient frequency to develop a record of one or more data values per day. The frequency of data collection can range from continuous recording to periodic sample or data collection on a daily or near-daily basis.

Data Collection Platform (DCP) is an electronic instrument that collects, processes, and stores data from various sensors, and transmits the data by satellite data relay, line-of-sight radio, and/or landline telemetry.

Data logger is a microprocessor-based data acquisition system designed specifically to acquire, process, and store data. Data are usually downloaded from onsite data loggers for entry into office data systems.

Datum is a surface or point relative to which measurements of height and/or horizontal position are reported. A vertical datum is a horizontal surface used as the zero point for measurements of gage height, stage, or elevation; a horizontal datum is a reference for positions given in terms of latitude-longitude, State Plane coordinates, or UTM coordinates. (See also “Gage datum,” “Land-surface datum,” “National Geodetic Vertical Datum of 1929,” and “North American Vertical Datum of 1988”)

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number

of cells per milliliter (cells/mL) of sample. (See also “Phytoplankton”)

Diel is of or pertaining to a 24-hour period of time; a regular daily cycle.

Discharge, or flow, is the rate that matter passes through a cross section of a stream channel or other water body per unit of time. The term commonly refers to the volume of water (including, unless otherwise stated, any sediments or other constituents suspended or dissolved in the water) that passes a cross section in a stream channel, canal, pipeline, etc., within a given period of time (cubic feet per second). Discharge also can apply to the rate at which constituents such as suspended sediment, bedload, and dissolved or suspended chemical constituents, pass through a cross section, in which cases the quantity is expressed as the mass of constituent that passes the cross section in a given period of time (tons per day).

Dissolved refers to that material in a representative water sample that passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal and State agencies that collect water-quality data. Determinations of “dissolved” constituent concentrations are made on sample water that has been filtered.

Dissolved oxygen (DO) is the molecular oxygen (oxygen gas) dissolved in water. The concentration in water is a function of atmospheric pressure, temperature, and dissolved-solids concentration of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved-solids concentration. Photosynthesis and respiration by plants commonly cause diurnal variations in dissolved-oxygen concentration in water from some streams.

Dissolved-solids concentration in water is the quantity of dissolved material in a sample of water. It is determined either analytically by the “residue-on-evaporation” method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4926 to convert it to carbonate. Alternatively, alkalinity concentration (as mg/L CaCO₃) can be converted to carbonate concentration by multiplying by 0.60.

Diversity index (H) (Shannon Index) is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = - \sum_{i=1}^s \frac{n_i}{n} \log_2 \frac{n_i}{n}$$

where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specific location is that area upstream from the location, measured in a horizontal plane, that has a common outlet at the site for its surface runoff from precipitation that normally drains by gravity into a stream. Drainage areas given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

Drainage basin is a part of the Earth's surface that contains a drainage system with a common outlet for its surface runoff. (See "Drainage area")

Dry mass refers to the mass of residue present after drying in an oven at 105 °C, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass. (See also "Ash mass," "Biomass," and "Wet mass")

Dry weight refers to the weight of animal tissue after it has been dried in an oven at 65 °C until a constant weight is achieved. Dry weight represents total organic and inorganic matter in the tissue. (See also "Wet weight")

Enterococcus bacteria are commonly found in the feces of humans and other warm-blooded animals. Although some strains are ubiquitous and not related to fecal pollution, the presence of enterococci in water is an indication of fecal pollution and the possible presence of enteric pathogens. Enterococcus bacteria are those bacteria that produce pink to red colonies with black or reddish-brown precipitate after incubation at 41 °C on mE agar and subsequent transfer to EIA medium. Enterococci include *Streptococcus fecalis*, *Streptococcus feacium*, *Streptococcus avium*, and their variants. (See also "Bacteria")

EPT Index is the total number of distinct taxa within the insect orders Ephemeroptera, Plecoptera, and Trichoptera. This index summarizes the taxa richness within the aquatic insects that are generally considered pollution sensitive, the index usually decreases with pollution.

Escherichia coli (E. coli) are bacteria present in the intestine and feces of warm-blooded animals. *E. coli* are a member species of the fecal coliform group of indicator bacteria. In the laboratory, they are defined as those bacteria that produce yellow or yellow-brown colonies on a filter pad saturated with urea substrate broth after primary culturing for 22 to 24 hours at 44.5 °C on mTEC medium. Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Estimated (E) value of a concentration is reported when an analyte is detected and all criteria for a positive result are

met. If the concentration is less than the method detection limit (MDL), an 'E' code will be reported with the value. If the analyte is qualitatively identified as present, but the quantitative determination is substantially more uncertain, the National Water Quality Laboratory will identify the result with an 'E' code even though the measured value is greater than the MDL. A value reported with an 'E' code should be used with caution. When no analyte is detected in a sample, the default reporting value is the MDL preceded by a less than sign (<).

Euglenoids (Euglenophyta) are a group of algae that are usually free-swimming and rarely creeping. They have the ability to grow either photosynthetically in the light or heterotrophically in the dark. (See also "Phytoplankton")

Extractable organic halides (EOX) are organic compounds that contain halogen atoms such as chlorine. These organic compounds are semi-volatile and extractable by ethyl acetate from air-dried streambed sediments. The ethyl acetate extract is combusted, and the concentration is determined by microcoulometric determination of the halides formed. The concentration is reported as micrograms of chlorine per gram of the dry weight of the streambed sediments.

Fecal coliform bacteria are present in the intestine or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory, they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5 °C plus or minus 0.2 °C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Fecal streptococcal bacteria are present in the intestine of warm-blooded animals and are ubiquitous in the environment. They are characterized as gram-positive, cocci bacteria that are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms that produce red or pink colonies within 48 hours at 35 °C plus or minus 1.0 °C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Fire algae (Pyrrhophyta) are free-swimming unicells characterized by a red pigment spot. (See also "Phytoplankton")

Flow-duration percentiles are values on a scale of 100 that indicate the percentage of time for which a flow is not exceeded. For example, the 90th percentile of river flow is greater than or equal to 90 percent of all recorded flow rates.

Gage datum is a horizontal surface used as a zero point for measurement of stage or gage height. This surface usually is located slightly below the lowest point of the stream bottom such that the gage height is usually slightly larger than

the maximum depth of water. Because the gage datum itself is not an actual physical object, the datum usually is defined by specifying the elevations of permanent reference marks such as bridge abutments and survey monuments, and the gage is set to agree with the reference marks. Gage datum is a local datum that is maintained independently of any National geodetic datum. However, if the elevation of the gage datum relative to the National datum (North American Vertical Datum of 1988 or National Geodetic Vertical Datum of 1929) has been determined, then the gage readings can be converted to elevations above the National datum by adding the elevation of the gage datum to the gage reading.

Gage height (G.H.) is the water-surface elevation, in feet above the gage datum. If the water surface is below the gage datum, the gage height is negative. Gage height is often used interchangeably with the more general term “stage,” although gage height is more appropriate when used in reference to a reading on a gage.

Gage values are values that are recorded, transmitted and/or computed from a gaging station. Gage values typically are collected at 5-, 15-, or 30-minute intervals.

Gaging station is a site on a stream, canal, lake, or reservoir where systematic observations of stage, discharge, or other hydrologic data are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

Gas chromatography/flame ionization detector (GC/FID) is a laboratory analytical method used as a screening technique for semivolatile organic compounds that are extractable from water in methylene chloride.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algae mats or floating “moss” in lakes. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample. (See also “Phytoplankton”)

Habitat quality index is the qualitative description (level 1) of instream habitat and riparian conditions surrounding the reach sampled. Scores range from 0 to 100 percent with higher scores indicative of desirable habitat conditions for aquatic life. Index only applicable to wadable streams.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations (primarily calcium and magnesium) and is expressed as the equivalent concentration of calcium carbonate (CaCO_3).

High tide is the maximum height reached by each rising tide. The high-high and low-high tides are the higher and lower of the two high tides, respectively, of each tidal day. See NOAA web site: <http://www.co-ops.nos.noaa.gov/tide-glos.html>

Hilsenhoff’s Biotic Index (HBI) is an indicator of organic pollution which uses tolerance values to weight taxa abundances; usually increases with pollution. It is calculated as follows:

$$\text{HBI} = \frac{\sum (n)(a)}{N}$$

where n is the number of individuals of each taxon, a is the tolerance value of each taxon, and N is the total number of organisms in the sample.

Horizontal datum (See “Datum”)

Hydrologic benchmark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a benchmark station may be used to separate effects of natural from human-induced changes in other basins that have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped benchmark basin.

Hydrologic index stations referred to in this report are four continuous-record gaging stations that have been selected as representative of streamflow patterns for their respective regions. Station locations are shown on index maps.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as defined by the former Office of Water Data Coordination and delineated on the State Hydrologic Unit Maps by the USGS. Each hydrologic unit is identified by an 8-digit number.

Inch (IN., in.), as used in this report, refers to the depth to which the drainage area would be covered with water if all of the runoff for a given time period were uniformly distributed on it. (See also “Annual runoff”)

Instantaneous discharge is the discharge at a particular instant of time. (See also “Discharge”)

Laboratory Reporting Level (LRL) is generally equal to twice the yearly determined long-term method detection level (LT-MDL). The LRL controls false negative error. The probability of falsely reporting a non-detection for a sample that contained an analyte at a concentration equal to or greater than the LRL is predicted to be less than or equal to 1 percent. The value of the LRL will be reported with a “less than” (<) remark code for samples in which the analyte was not detected. The National Water Quality Laboratory collects quality-control data from selected analytical methods on a continuing basis to determine LT-MDLs and to establish LRLs. These values are reevaluated annually based on the most current quality-control data and may, therefore, change. [Note: In several previous NWQL documents (Connor and others, 1998; NWQL Technical Memorandum 98.07, 1998), the LRL was called the non-detection value or NDV—a term that is no longer used.)

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

Light-attenuation coefficient, also known as the extinction coefficient, is a measure of water clarity. Light is attenuated according to the Lambert-Beer equation

$$I = I_0 e^{-\lambda L},$$

where I_0 is the source light intensity, I is the light intensity at length L (in meters) from the source, λ is the light-attenuation coefficient, and e is the base of the natural logarithm. The light attenuation coefficient is defined as

$$\lambda = -\frac{1}{L} \log_e \frac{I}{I_0}.$$

Lipid is any one of a family of compounds that are insoluble in water and that make up one of the principal components of living cells. Lipids include fats, oils, waxes, and steroids. Many environmental contaminants such as organochlorine pesticides are lipophilic.

Long-Term Method Detection Level (LT-MDL) is a detection level derived by determining the standard deviation of a minimum of 24 method detection limit (MDL) spike sample measurements over an extended period of time. LT-MDL data are collected on a continuous basis to assess year-to-year variations in the LT-MDL. The LT-MDL controls false positive error. The chance of falsely reporting a concentration at or greater than the LT-MDL for a sample that did not contain the analyte is predicted to be less than or equal to 1 percent.

Low tide is the minimum height reached by each falling tide. The high-low and low-low tides are the higher and lower of the two low tides, respectively, of each tidal day. *See NOAA web site:*
<http://www.co-ops.nos.noaa.gov/tideglos.html>

Macrophytes are the macroscopic plants in the aquatic environment. The most common macrophytes are the rooted vascular plants that are usually arranged in zones in aquatic ecosystems and restricted in the area by the extent of illumination through the water and sediment deposition along the shoreline.

Mean concentration of suspended sediment (Daily mean suspended-sediment concentration) is the time-weighted concentration of suspended sediment passing a stream cross section during a given time period. (See also “Daily mean suspended-sediment concentration” and “Suspended-sediment concentration”)

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period. (See also “Discharge”)

Mean high or low tide is the average of all high or low tides, respectively, over a specific period.

Mean sea level is a local tidal datum. It is the arithmetic mean of hourly heights observed over the National Tidal Datum Epoch. Shorter series are specified in the name; for example, monthly mean sea level and yearly mean sea level. In order that they may be recovered when needed, such datums are referenced to fixed points known as benchmarks. (See also “Datum”)

Measuring point (MP) is an arbitrary permanent reference point from which the distance to water surface in a well is measured to obtain water level.

Membrane filter is a thin microporous material of specific pore size used to filter bacteria, algae, and other very small particles from water.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Method Detection Limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99-percent confidence that the analyte concentration is greater than zero. It is determined from the analysis of a sample in a given matrix containing the analyte. At the MDL concentration, the risk of a false positive is predicted to be less than or equal to 1 percent.

Methylene blue active substances (MBAS) are apparent detergents. The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

Micrograms per gram (UG/G, $\mu\text{g/g}$) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

Micrograms per kilogram (UG/KG, $\mu\text{g/kg}$) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the constituent per unit mass (kilogram) of the material analyzed. One microgram per kilogram is equivalent to 1 part per billion.

Micrograms per liter (UG/L, $\mu\text{g/L}$) is a unit expressing the concentration of chemical constituents in water as mass (micrograms) of constituent per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter. One microgram per liter is equivalent to 1 part per billion.

Microsiemens per centimeter (US/CM, $\mu\text{S/cm}$) is a unit expressing the amount of electrical conductivity of a solution as measured between opposite faces of a centimeter cube of solution at a specified temperature. Siemens is the International System of Units nomenclature. It is

synonymous with mhos and is the reciprocal of resistance in ohms.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in water as the mass (milligrams) of constituent per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L and is based on the mass of dry sediment per liter of water-sediment mixture.

Minimum Reporting Level (MRL) is the smallest measured concentration of a constituent that may be reliably reported by using a given analytical method (Timme, 1995).

Miscellaneous site, miscellaneous station, or miscellaneous sampling site is a site where streamflow, sediment, and/or water-quality data or water-quality or sediment samples are collected once, or more often on a random or discontinuous basis to provide better areal coverage for defining hydrologic and water-quality conditions over a broad area in a river basin.

Most probable number (MPN) is an index of the number of coliform bacteria that, more probably than any other number, would give the results shown by the laboratory examination; it is not an actual enumeration. MPN is determined from the distribution of gas-positive cultures among multiple inoculated tubes.

Multiple-plate samplers are artificial substrates of known surface area used for obtaining benthic invertebrate samples. They consist of a series of spaced, hardboard plates on an eyebolt.

Nanograms per liter (NG/L, ng/L) is a unit expressing the concentration of chemical constituents in solution as mass (nanograms) of solute per unit volume (liter) of water. One million nanograms per liter is equivalent to 1 milligram per liter.

National Geodetic Vertical Datum of 1929 (NGVD of 1929) is a fixed reference adopted as a standard geodetic datum for elevations determined by leveling. It was formerly called "Sea Level Datum of 1929" or "mean sea level." Although the datum was derived from the mean sea level at 26 tide stations, it does not necessarily represent local mean sea level at any particular place. *See NOAA web site: <http://www.ngs.noaa.gov/faq.shtml#WhatVD29VD88>* (See "North American Vertical Datum of 1988")

Natural substrate refers to any naturally occurring immersed or submersed solid surface, such as a rock or tree, upon which an organism lives. (See also "Substrate")

Nekton are the consumers in the aquatic environment and consist of large free-swimming organisms that are capable of sustained, directed mobility.

Nephelometric turbidity unit (NTU) is the measurement for reporting turbidity that is based on use of a standard suspension of Formazin. Turbidity measured in NTU uses

nephelometric methods that depend on passing specific light of a specific wavelength through the sample.

North American Vertical Datum of 1988 (NAVD 1988) is a fixed reference adopted as the official civilian vertical datum for elevations determined by Federal surveying and mapping activities in the U.S. This datum was established in 1991 by minimum-constraint adjustment of the Canadian, Mexican, and U.S. first-order terrestrial leveling networks.

Open or screened interval is the length of unscreened opening or of well screen through which water enters a well, in feet below land surface.

Organic carbon (OC) is a measure of organic matter present in aqueous solution, suspension, or bottom sediments. May be reported as dissolved organic carbon (DOC), particulate organic carbon (POC), or total organic carbon (TOC).

Organic mass or volatile mass of the living substance is the difference between the dry mass and ash mass and represents the actual mass of the living matter. Organic mass is expressed in the same units as for ash mass and dry mass. (See also "Ash mass," "Biomass," and "Dry mass")

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter (m²), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

Organochlorine compounds are any chemicals that contain carbon and chlorine. Organochlorine compounds that are important in investigations of water, sediment, and biological quality include certain pesticides and industrial compounds.

Parameter Code is a 5-digit number used in the USGS computerized data system, National Water Information System (NWIS), to uniquely identify a specific constituent or property.

Partial-record station is a site where discrete measurements of one or more hydrologic parameters are obtained over a period of time without continuous data being recorded or computed. A common example is a crest-stage gage partial-record station at which only peak stages and flows are recorded.

Particle size is the diameter, in millimeters (mm), of a particle determined by sieve or sedimentation methods. The sedimentation method utilizes the principle of Stokes Law to calculate sediment particle sizes. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube, Sedigraph) determine fall diameter of particles in

either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification, as used in this report, agrees with the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay	0.00024 - 0.004	Sedimentation
Silt	0.004 - 0.062	Sedimentation
Sand	0.062 - 2.0	Sedimentation/sieve
Gravel	2.0 - 64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic matter is removed, and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native water analysis.

Peak flow (peak stage) is an instantaneous local maximum value in the continuous time series of streamflows or stages, preceded by a period of increasing values and followed by a period of decreasing values. Several peak values ordinarily occur in a year. The maximum peak value in a year is called the annual peak; peaks lower than the annual peak are called secondary peaks. Occasionally, the annual peak may not be the maximum value for the year; in such cases, the maximum value occurs at midnight at the beginning or end of the year, on the recession from or rise toward a higher peak in the adjoining year. If values are recorded at a discrete series of times, the peak recorded value may be taken as an approximation to the true peak, which may occur between the recording instants. If the values are recorded with finite precision, a sequence of equal recorded values may occur at the peak; in this case, the first value is taken as the peak.

Percent composition or **percent of total** is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, weight, mass, or volume.

Percent shading is determined by using a clinometer to estimate left and right bank shading. The values are added together and divided by 180 to determine percent shading relative to a horizontal surface.

Periodic-record station is a site where stage, discharge, sediment, chemical, physical, or other hydrologic measurements are made one or more times during a year, but at a frequency insufficient to develop a daily record.

Periphyton is the assemblage of microorganisms attached to and living upon submerged solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton are useful indicators of water quality.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

pH of water is the negative logarithm of the hydrogen-ion activity. Solutions with pH less than 7 are termed "acidic," and solutions with a pH greater than 7 are termed "basic." Solutions with a pH of 7 are neutral. The presence and concentration of many dissolved chemical constituents found in water are, in part, influenced by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms are also influenced, in part, by the hydrogen-ion activity of water.

Phytoplankton is the plant part of the plankton. They are usually microscopic, and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment and are commonly known as algae. (See also "Plankton")

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactive nuclide represented by a curie (Ci). A curie is the quantity of radioactive nuclide that yields 3.7×10^{10} radioactive disintegrations per second (dps). A picocurie yields 0.037 dps, or 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers. Concentrations are expressed as a number of cells per milliliter (cells/mL of sample).

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Polychlorinated naphthalenes (PCNs) are industrial chemicals that are mixtures of chlorinated naphthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCBs) and have been identified in commercial PCB preparations.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated (carbon method) by the plants.

Primary productivity (carbon method) is expressed as milligrams of carbon per area per unit time [$\text{mg C}/(\text{m}^2/\text{time})$] for periphyton and macrophytes or per volume [$\text{mg C}/(\text{m}^3/$

time)] for phytoplankton. Carbon method defines the amount of carbon dioxide consumed as measured by radioactive carbon (carbon-14). The carbon-14 method is of greater sensitivity than the oxygen light and dark bottle method and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period. (See also “Primary productivity”)

Primary productivity (oxygen method) is expressed as milligrams of oxygen per area per unit time [$\text{mg O}/(\text{m}^2/\text{time})$] for periphyton and macrophytes or per volume [$\text{mg O}/(\text{m}^3/\text{time})$] for phytoplankton. Oxygen method defines production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period. (See also “Primary productivity”)

Radioisotopes are isotopic forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus; for example, ordinary chlorine is a mixture of isotopes having atomic weights of 35 and 37, and the natural mixture has an atomic weight of about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron. There are 275 isotopes of the 81 stable elements, in addition to more than 800 radioactive isotopes.

Recoverable from bed (bottom) material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results. (See also “Bed material”)

Recurrence interval, also referred to as return period, is the average time, usually expressed in years, between occurrences of hydrologic events of a specified type (such as exceedances of a specified high flow or non-exceedance of a specified low flow). The terms “return period” and “recurrence interval” do not imply regular cyclic occurrence. The actual times between occurrences vary randomly, with most of the times being less than the average and a few being substantially greater than the average. For example, the 100-year flood is the flow rate that is

exceeded by the annual maximum peak flow at intervals whose average length is 100 years (that is, once in 100 years, on average); almost two-thirds of all exceedances of the 100-year flood occur less than 100 years after the previous exceedance, half occur less than 70 years after the previous exceedance, and about one-eighth occur more than 200 years after the previous exceedance. Similarly, the 7-day 10-year low flow ($7Q_{10}$) is the flow rate below which the annual minimum 7-day-mean flow dips at intervals whose average length is 10 years (that is, once in 10 years, on average); almost two-thirds of the non-exceedances of the $7Q_{10}$ occur less than 10 years after the previous non-exceedance, half occur less than 7 years after, and about one-eighth occur more than 20 years after the previous non-exceedance. The recurrence interval for annual events is the reciprocal of the annual probability of occurrence. Thus, the 100-year flood has a 1-percent chance of being exceeded by the maximum peak flow in any year, and there is a 10-percent chance in any year that the annual minimum 7-day-mean flow will be less than the $7Q_{10}$.

Replicate samples are a group of samples collected in a manner such that the samples are thought to be essentially identical in composition.

Return period (See “Recurrence interval”)

River mileage is the curvilinear distance, in miles, measured upstream from the mouth along the meandering path of a stream channel in accordance with Bulletin No. 14 (October 1968) of the Water Resources Council, and typically used to denote location along a river.

Runoff is the quantity of water that is discharged (“runs off”) from a drainage basin in a given time period. Runoff data may be presented as volumes in acre-feet, as mean discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches. (See also “Annual runoff”)

Sea level, as used in this report, refers to one of the two commonly used national vertical datums, (NGVD 1929 or NAVD 1988). See separate entries for definitions of these datums. See conversion of units page (inside back cover) for identification of the datum used in this report.

Sediment is solid material that originates mostly from disintegrated rocks; when transported by, suspended in, or deposited from water, it is referred to as “fluvial sediment.” Sediment includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental and land-use factors. Some major factors are topography, soil characteristics, land cover, and depth and intensity of precipitation.

Seven-day 10-year low flow ($7Q_{10}$) is the discharge below which the annual 7-day minimum flow falls in 1 year out of 10 on the long-run average. The recurrence interval of

the 7Q10 is 10 years; the chance that the annual 7-day minimum flow will be less than the 7Q10 is 10 percent in any given year. (See also “Recurrence interval” and “Annual 7-day minimum”)

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Sodium hazard in water is an index that can be used to evaluate the suitability of water for irrigating crops.

Specific electrical conductance (conductivity) is a measure of the capacity of water (or other media) to conduct an electrical current. It is expressed in microsiemens per centimeter at 25 °C. Specific electrical conductance is a function of the types and quantity of dissolved substances in water and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is from 55 to 75 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stable isotope ratio (per MIL/MIL) is a unit expressing the ratio of the abundance of two radioactive isotopes. Isotope ratios are used in hydrologic studies to determine the age or source of specific waters, to evaluate mixing of different waters, as an aid in determining reaction rates, and other chemical or hydrologic processes.

Stage (See “Gage height”)

Stage-discharge relation is the relation between the water-surface elevation, termed stage (gage height), and the volume of water flowing in a channel per unit time.

Streamflow is the discharge that occurs in a natural channel. Although the term “discharge” can be applied to the flow of a canal, the word “streamflow” uniquely describes the discharge in a surface stream course. The term “streamflow” is more general than “runoff” as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives.

Substrate Embeddedness Class is a visual estimate of riffle streambed substrate larger than gravel that is surrounded or covered by fine sediment (<2mm, sand or finer). Below are the class categories expressed as percent covered by fine sediment:

0	< no gravel or larger substrate		
1	> 75%		
2	51-75%	4	5-25%
3	26-50%	5	< 5%

Surface area of a lake is that area (acres) encompassed by the boundary of the lake as shown on USGS topographic maps, or other available maps or photographs. Because

surface area changes with lake stage, surface areas listed in this report represent those determined for the stage at the time the maps or photographs were obtained.

Surficial bed material is the upper surface (0.1 to 0.2 ft) of the bed material such as that material which is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is operationally defined as the material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative suspended water-sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the “total” amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results. Determinations of “suspended, recoverable” constituents are made either by directly analyzing the suspended material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent. (See also “Suspended”)

Suspended sediment is the sediment maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid. (See also “Sediment”)

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). The analytical technique uses the mass of all of the sediment and the net weight of the water-sediment mixture in a sample to compute the suspended-sediment concentration. (See also “Sediment” and “Suspended sediment”)

Suspended-sediment discharge (tons/day) is the rate of sediment transport, as measured by dry mass or volume, that passes a cross section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft³/s) x 0.0027. (See also “Sediment,” “Suspended sediment,” and “Suspended-sediment concentration”)

Suspended-sediment load is a general term that refers to a given characteristic of the material in suspension that passes a point during a specified period of time. The term needs to be qualified, such as “annual suspended-sediment

load” or “sand-size suspended-sediment load,” and so on. It is not synonymous with either suspended-sediment discharge or concentration. (See also “Sediment”)

Suspended, total is the total amount of a given constituent in the part of a water-sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. Knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as “suspended, total.” Determinations of “suspended, total” constituents are made either by directly analyzing portions of the suspended material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent. (See also “Suspended”)

Suspended solids, total residue at 105 °C concentration is the concentration of inorganic and organic material retained on a filter, expressed as milligrams of dry material per liter of water (mg/L). An aliquot of the sample is used for this analysis.

Synoptic studies are short-term investigations of specific water-quality conditions during selected seasonal or hydrologic periods to provide improved spatial resolution for critical water-quality conditions. For the period and conditions sampled, they assess the spatial distribution of selected water-quality conditions in relation to causative factors, such as land use and contaminant sources.

Taxa richness is the total number of distinct species or groups and usually decreases with pollution. (See also “Percent Shading”)

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata*, is the following:

Kingdom:	Animal
Phylum:	Arthropoda
Class:	Insecta
Order:	Ephemeroptera
Family:	Ephemeridae
Genus:	<i>Hexagenia</i>
Species:	<i>Hexagenia limbata</i>

Temperature preferences:

Cold – preferred water temperature for the species is less than 20 °C or spawning temperature preference less than 16 °C and native distribution is considered to be predominantly north of 45° N. latitude.

Warm – preferred water temperatures for the species is greater than 20 °C or spawning temperature preference greater than 16 °C and native distribution is considered to be predominantly south of 45° N. latitude.

Cool – intermediate between cold and warm water temperature preferences.

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term “temperature recorder” is used in the table descriptions and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water resulting from the mixing of flow proportionally to the duration of the concentration.

Tons per acre-foot (T/acre-ft) is the dry mass (tons) of a constituent per unit volume (acre-foot) of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

Tons per day (T/DAY, tons/d) is a common chemical or sediment discharge unit. It is the quantity of a substance in solution, in suspension, or as bedload that passes a stream section during a 24-hour period. It is equivalent to 2,000 pounds per day, or 0.9072 metric tons per day.

Total is the amount of a given constituent in a representative whole-water (unfiltered) sample, regardless of the constituent’s physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as “total.” (Note that the word “total” does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined at least 95 percent of the constituent in the sample.)

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. This group includes coliforms that inhabit the intestine of warm-blooded animals and those that inhabit soils. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria that ferment lactose with gas formation within 48 hours at 35 °C. In the laboratory, these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35 °C plus or minus 1.0 °C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are

expressed as number of colonies per 100 mL of sample. (See also “Bacteria”)

Total discharge is the quantity of a given constituent, measured as dry mass or volume, that passes a stream cross section per unit of time. When referring to constituents other than water, this term needs to be qualified, such as “total sediment discharge,” “total chloride discharge,” and so on.

Total in bottom material is the amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as “total in bottom material.”

Total length (fish) is the straight-line distance from the anterior point of a fish specimen’s snout, with the mouth closed, to the posterior end of the caudal (tail) fin, with the lobes of the caudal fin squeezed together.

Total load refers to all of a constituent in transport. When referring to sediment, it includes suspended load plus bed load.

Total organism count is the number of organisms collected and enumerated in any particular sample. (See also “Organism count/volume.”)

Total recoverable is the amount of a given constituent in a whole-water sample after a sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the “total” amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data for whole-water samples, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures may produce different analytical results.

Total sediment discharge is the mass of suspended-sediment plus bed-load transport, measured as dry weight, that passes a cross section in a given time. It is a rate and is reported as tons per day. (See also “Sediment,” “Suspended sediment,” “Suspended-Sediment Concentration,” “Bed-load,” and “Bedload discharge”)

Total sediment load or total load is the sediment in transport as bedload and suspended-sediment load. The term may be qualified, such as “annual suspended-sediment load” or “sand-size suspended-sediment load,” and so on. It differs from total sediment discharge in that load refers to the material whereas discharge refers to the quantity of material, expressed in units of mass per unit time. (See also

“Sediment,” “Suspended-Sediment Load,” and “Total load”)

Trophic group:

Filter feeder – diet composed of suspended plant and/or animal material.

Herbivore – diet composed predominantly of plant material.

Invertivore – diet composed predominantly of invertebrates.

Omnivore – diet composed of at least 25-percent plant and 25-percent animal material.

Piscivore – diet composed predominantly of fish.

Turbidity is the reduction in the transparency of a solution due to the presence of suspended and some dissolved substances. The measurement technique records the collective optical properties of the solution that cause light to be scattered and attenuated rather than transmitted in straight lines; the higher the intensity of scattered or attenuated light, the higher the value of the turbidity. Turbidity is expressed in nephelometric turbidity units (NTU). Depending on the method used, the turbidity units as NTU can be defined as the intensity of light of a specified wavelength scattered or attenuated by suspended particles or absorbed at a method specified angle, usually 90 degrees, from the path of the incident light. Currently approved methods for the measurement of turbidity in the USGS include those that conform to EPA Method 180.1, ASTM D1889-00, and ISO 7027. Measurements of turbidity by these different methods and different instruments are unlikely to yield equivalent values. Consequently, the method of measurement and type of instrument used to derive turbidity records should be included in the “REMARKS” column of the Annual Data Report.

Ultraviolet (UV) absorbance (absorption) at 254 or 280 nanometers is a measure of the aggregate concentration of the mixture of UV absorbing organic materials dissolved in the analyzed water, such as lignin, tannin, humic substances, and various aromatic compounds. UV absorbance (absorption) at 254 or 280 nanometers is measured in UV absorption units per centimeter of pathlength of UV light through a sample.

Vertical datum (See “Datum”)

Volatile organic compounds (VOCs) are organic compounds that can be isolated from the water phase of a sample by purging the water sample with inert gas, such as helium, and subsequently analyzed by gas chromatography. Many VOCs are human-made chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They are often components of fuels, solvents, hydraulic fluids, paint thinners, and dry cleaning agents commonly used in urban settings. VOC contamination of drinking-water supplies is a human health concern because many are

toxic and are known or suspected human carcinogens (U.S. Environmental Protection Agency, 1996).

Water table is the level in the saturated zone at which the pressure is equal to the atmospheric pressure.

Water-table aquifer is an unconfined aquifer within which is found the water table.

Water year in USGS reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 2001, is called the “2001 water year.”

WDR is used as an abbreviation for “Water-Data Report” in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports. (WRD was used as an abbreviation for “Water-Resources Data” in reports published prior to 1976.)

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

Wet mass is the mass of living matter plus contained water. (See also “Biomass” and “Dry mass”)

Wet weight refers to the weight of animal tissue or other substance including its contained water. (See also “Dry weight”)

WSP is used as an acronym for “Water-Supply Paper” in reference to previously published reports.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers. (See also “Plankton”)

TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS OF THE U.S. GEOLOGICAL SURVEY

The U.S.G.S. publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, section A of book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S.G.S., Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be made in the form of a check or money order payable to the "U.S. Geological Survey." Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and mention the "U.S. Geological Survey Techniques of Water-Resources Investigations."

Book 1. Collection of Water Data by Direct Measurement***Section D. Water Quality***

- 1-D1. *Water temperature—influential factors, field measurement, and data presentation*, by H.H. Stevens, Jr., J.F. Ficke, and G.F. Smoot: USGS–TWRI book 1, chap. D1. 1975. 65 p.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W.W. Wood: USGS–TWRI book 1, chap. D2. 1976. 24 p.

Book 2. Collection of Environmental Data***Section D. Surface Geophysical Methods***

- 2-D1. *Application of surface geophysics to ground-water investigations*, by A.A.R. Zohdy, G.P. Eaton, and D.R. Mabey: USGS–TWRI book 2, chap. D1. 1974. 116 p.
- 2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F.P. Haeni: USGS–TWRI book 2, chap. D2. 1988. 86 p.

Section E. Subsurface Geophysical Methods

- 2-E1. *Application of borehole geophysics to water-resources investigations*, by W.S. Keys and L.M. MacCary: USGS–TWRI book 2, chap. E1. 1971. 126 p.
- 2-E2. *Borehole geophysics applied to ground-water investigations*, by W.S. Keys: USGS–TWRI book 2, chap. E2. 1990. 150 p.

Section F. Drilling and Sampling Methods

- 2-F1. *Application of drilling, coring, and sampling techniques to test holes and wells*, by Eugene Shuter and W.E. Teasdale: USGS–TWRI book 2, chap. F1. 1989. 97 p.

Book 3. Applications of Hydraulics***Section A. Surface-Water Techniques***

- 3-A1. *General field and office procedures for indirect discharge measurements*, by M.A. Benson and Tate Dalrymple: USGS–TWRI book 3, chap. A1. 1967. 30 p.
- 3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M.A. Benson: USGS–TWRI book 3, chap. A2. 1967. 12 p.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G.L. Bodhaine: USGS–TWRI book 3, chap. A3. 1968. 60 p.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H.F. Matthai: USGS–TWRI book 3, chap. A4. 1967. 44 p.
- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS–TWRI book 3, chap. A5. 1967. 29 p.

- 3-A6. *General procedure for gaging streams*, by R.W. Carter and Jacob Davidian: USGS–TWRI book 3, chap. A6. 1968. 13 p.
- 3-A7. *Stage measurement at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A7. 1968. 28 p.
- 3-A8. *Discharge measurements at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A8. 1969. 65 p.
- 3-A9. *Measurement of time of travel in streams by dye tracing*, by F.A. Kilpatrick and J.F. Wilson, Jr.: USGS–TWRI book 3, chap. A9. 1989. 27 p.
- 3-A10. *Discharge ratings at gaging stations*, by E.J. Kennedy: USGS–TWRI book 3, chap. A10. 1984. 59 p.
- 3-A11. *Measurement of discharge by the moving-boat method*, by G.F. Smoot and C.E. Novak: USGS–TWRI book 3, chap. A11. 1969. 22 p.
- 3-A12. *Fluorometric procedures for dye tracing*, Revised, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS–TWRI book 3, chap. A12. 1986. 34 p.
- 3-A13. *Computation of continuous records of streamflow*, by E.J. Kennedy: USGS–TWRI book 3, chap. A13. 1983. 53 p.
- 3-A14. *Use of flumes in measuring discharge*, by F.A. Kilpatrick and V.R. Schneider: USGS–TWRI book 3, chap. A14. 1983. 46 p.
- 3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS–TWRI book 3, chap. A15. 1984. 48 p.
- 3-A16. *Measurement of discharge using tracers*, by F.A. Kilpatrick and E.D. Cobb: USGS–TWRI book 3, chap. A16. 1985. 52 p.
- 3-A17. *Acoustic velocity meter systems*, by Antonius Laenen: USGS–TWRI book 3, chap. A17. 1985. 38 p.
- 3-A18. *Determination of stream reaeration coefficients by use of tracers*, by F.A. Kilpatrick, R.E. Rathbun, Nobuhiro Yotsukura, G.W. Parker, and L.L. DeLong: USGS–TWRI book 3, chap. A18. 1989. 52 p.
- 3-A19. *Levels at streamflow gaging stations*, by E.J. Kennedy: USGS–TWRI book 3, chap. A19. 1990. 31 p.
- 3-A20. *Simulation of soluble waste transport and buildup in surface waters using tracers*, by F.A. Kilpatrick: USGS–TWRI book 3, chap. A20. 1993. 38 p.
- 3-A21. *Stream-gaging cableways*, by C. Russell Wagner: USGS–TWRI book 3, chap. A21. 1995. 56 p.

Section B. Ground-Water Techniques

- 3-B1. *Aquifer-test design, observation, and data analysis*, by R.W. Stallman: USGS–TWRI book 3, chap. B1. 1971. 26 p.
- 3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G.D. Bennett: USGS–TWRI book 3, chap. B2. 1976. 172 p.
- 3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J.E. Reed: USGS–TWRI book 3, chap. B3. 1980. 106 p.
- 3-B4. *Regression modeling of ground-water flow*, by R.L. Cooley and R.L. Naff: USGS–TWRI book 3, chap. B4. 1990. 232 p.
- 3-B4. *Supplement 1. Regression modeling of ground-water flow --Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems*, by R.L. Cooley: USGS–TWRI book 3, chap. B4. 1993. 8 p.
- 3-B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems—An introduction*, by O.L. Franke, T.E. Reilly, and G.D. Bennett: USGS–TWRI book 3, chap. B5. 1987. 15 p.
- 3-B6. *The principle of superposition and its application in ground-water hydraulics*, by T.E. Reilly, O.L. Franke, and G.D. Bennett: USGS–TWRI book 3, chap. B6. 1987. 28 p.

- 3-B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow*, by E.J. Wexler: USGS–TWRI book 3, chap. B7. 1992. 190 p.
- 3-B8. *System and boundary conceptualization in ground-water flow simulation*, by T.E. Reilly: USGS–TWRI book 3, chap. B8. 2001. 29 p.

Section C. Sedimentation and Erosion Techniques

- 3-C1. *Fluvial sediment concepts*, by H.P. Guy: USGS–TWRI book 3, chap. C1. 1970. 55 p.
- 3-C2. *Field methods for measurement of fluvial sediment*, by T.K. Edwards and G.D. Glysson: USGS–TWRI book 3, chap. C2. 1999. 89 p.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS–TWRI book 3, chap. C3. 1972. 66 p.

Book 4. Hydrologic Analysis and Interpretation

Section A. Statistical Analysis

- 4-A1. *Some statistical tools in hydrology*, by H.C. Riggs: USGS–TWRI book 4, chap. A1. 1968. 39 p.
- 4-A2. *Frequency curves*, by H.C. Riggs: USGS–TWRI book 4, chap. A2. 1968. 15 p.

Section B. Surface Water

- 4-B1. *Low-flow investigations*, by H.C. Riggs: USGS–TWRI book 4, chap. B1. 1972. 18 p.
- 4-B2. *Storage analyses for water supply*, by H.C. Riggs and C.H. Hardison: USGS–TWRI book 4, chap. B2. 1973. 20 p.
- 4-B3. *Regional analyses of streamflow characteristics*, by H.C. Riggs: USGS–TWRI book 4, chap. B3. 1973. 15 p.

Section D. Interrelated Phases of the Hydrologic Cycle

- 4-D1. *Computation of rate and volume of stream depletion by wells*, by C.T. Jenkins: USGS–TWRI book 4, chap. D1. 1970. 17 p.

Book 5. Laboratory Analysis

Section A. Water Analysis

- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M.J. Fishman and L.C. Friedman, editors: USGS–TWRI book 5, chap. A1. 1989. 545 p.
- 5-A2. *Determination of minor elements in water by emission spectroscopy*, by P.R. Barnett and E.C. Mallory, Jr.: USGS–TWRI book 5, chap. A2. 1971. 31 p.
- 5-A3. *Methods for the determination of organic substances in water and fluvial sediments*, edited by R.L. Wershaw, M.J. Fishman, R.R. Grabbe, and L.E. Lowe: USGS–TWRI book 5, chap. A3. 1987. 80 p.
- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, by L.J. Britton and P.E. Greenson, editors: USGS–TWRI book 5, chap. A4. 1989. 363 p.
- 5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS–TWRI book 5, chap. A5. 1977. 95 p.
- 5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments*, by L.C. Friedman and D.E. Erdmann: USGS–TWRI book 5, chap. A6. 1982. 181 p.

Section C. Sediment Analysis

- 5-C1. *Laboratory theory and methods for sediment analysis*, by H.P. Guy: USGS–TWRI book 5, chap. C1. 1969. 58 p.

Book 6. Modeling Techniques

Section A. Ground Water

- 6-A1. *A modular three-dimensional finite-difference ground-water flow model*, by M.G. McDonald and A.W. Harbaugh: USGS–TWRI book 6, chap. A1. 1988. 586 p.

- 6-A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model*, by S.A. Leake and D.E. Prudic: USGS–TWRI book 6, chap. A2. 1991. 68 p.
- 6-A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual*, by L.J. Torak: USGS–TWRI book 6, chap. A3. 1993. 136 p.
- 6-A4. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions*, by R.L. Cooley: USGS–TWRI book 6, chap. A4. 1992. 108 p.
- 6-A5. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 3: Design philosophy and programming details*, by L.J. Torak: USGS–TWRI book 6, chap. A5, 1993. 243 p.
- 6-A6. *A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction*, by Eric D. Swain and Eliezer J. Wexler: USGS–TWRI book 6, chap. A5, 1996. 125 p.

Book 7. Automated Data Processing and Computations

Section C. Computer Programs

- 7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P.C. Trescott, G.F. Pinder, and S.P. Larson: USGS–TWRI book 7, chap. C1. 1976. 116 p.
- 7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L.F. Konikow and J.D. Bredehoeft: USGS–TWRI book 7, chap. C2. 1978. 90 p.
- 7-C3. *A model for simulation of flow in singular and interconnected channels*, by R.W. Schaffranek, R.A. Baltzer, and D.E. Goldberg: USGS–TWRI book 7, chap. C3. 1981. 110 p.

Book 8. Instrumentation

Section A. Instruments for Measurement of Water Level

- 8-A1. *Methods of measuring water levels in deep wells*, by M.S. Garber and F.C. Koopman: USGS–TWRI book 8, chap. A1. 1968. 23 p.
- 8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J.D. Craig: USGS–TWRI book 8, chap. A2. 1983. 57 p.

Section B. Instruments for Measurement of Discharge

- 8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G.F. Smoot and C.E. Novak: USGS–TWRI book 8, chap. B2. 1968. 15 p.

Book 9. Handbooks for Water-Resources Investigations

Section A. National Field Manual for the Collection of Water-Quality Data

- 9-A1. *National Field Manual for the Collection of Water-Quality Data: Preparations for Water Sampling*, by F.D. Wilde, D.B. Radtke, Jacob Gibbs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A1. 1998. 47 p.
- 9-A2. *National Field Manual for the Collection of Water-Quality Data: Selection of Equipment for Water Sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibbs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A2. 1998. 94 p.
- 9-A3. *National Field Manual for the Collection of Water-Quality Data: Cleaning of Equipment for Water Sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibbs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A3. 1998. 75 p.
- 9-A4. *National Field Manual for the Collection of Water-Quality Data: Collection of Water Samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibbs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A4. 1999. 156 p.
- 9-A5. *National Field Manual for the Collection of Water-Quality Data: Processing of Water Samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibbs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A5. 1999. 149 p.
- 9-A6. *National Field Manual for the Collection of Water-Quality Data: Field Measurements*, edited by F.D. Wilde and D.B. Radtke: USGS–TWRI book 9, chap. A6. 1998. Variously paginated.

- 9-A7. *National Field Manual for the Collection of Water-Quality Data: Biological Indicators*, edited by D.N. Myers and F.D. Wilde: USGS–TWRI book 9, chap. A7. 1997 and 1999. Variousy paginated.
- 9-A8. *National Field Manual for the Collection of Water-Quality Data: Bottom-material samples*, by D.B. Radtke: USGS–TWRI book 9, chap. A8. 1998. 48 p.
- 9-A9. *National Field Manual for the Collection of Water-Quality Data: Safety in Field Activities*, by S.L. Lane and R.G. Fay: USGS–TWRI book 9, chap. A9. 1998. 60 p.

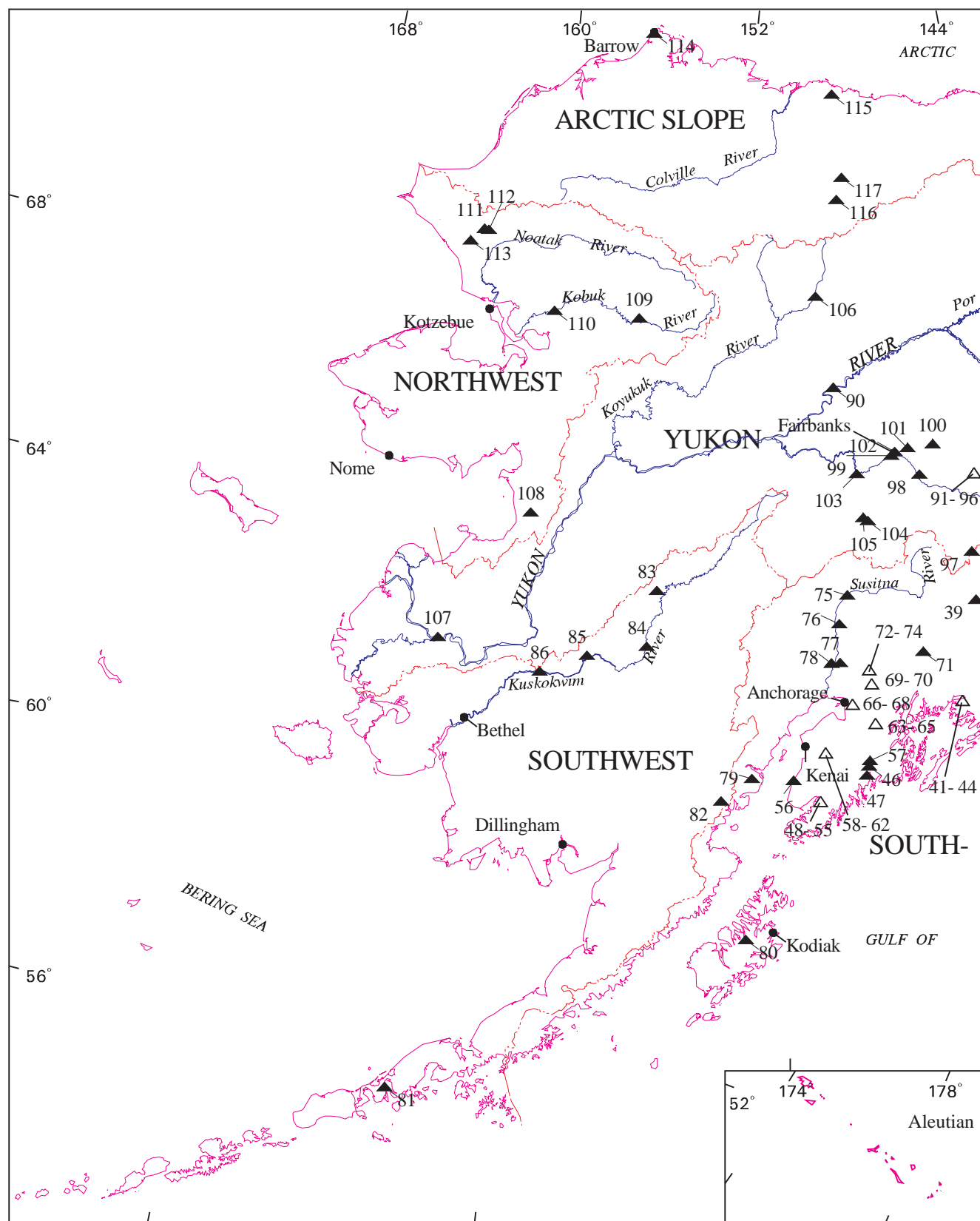
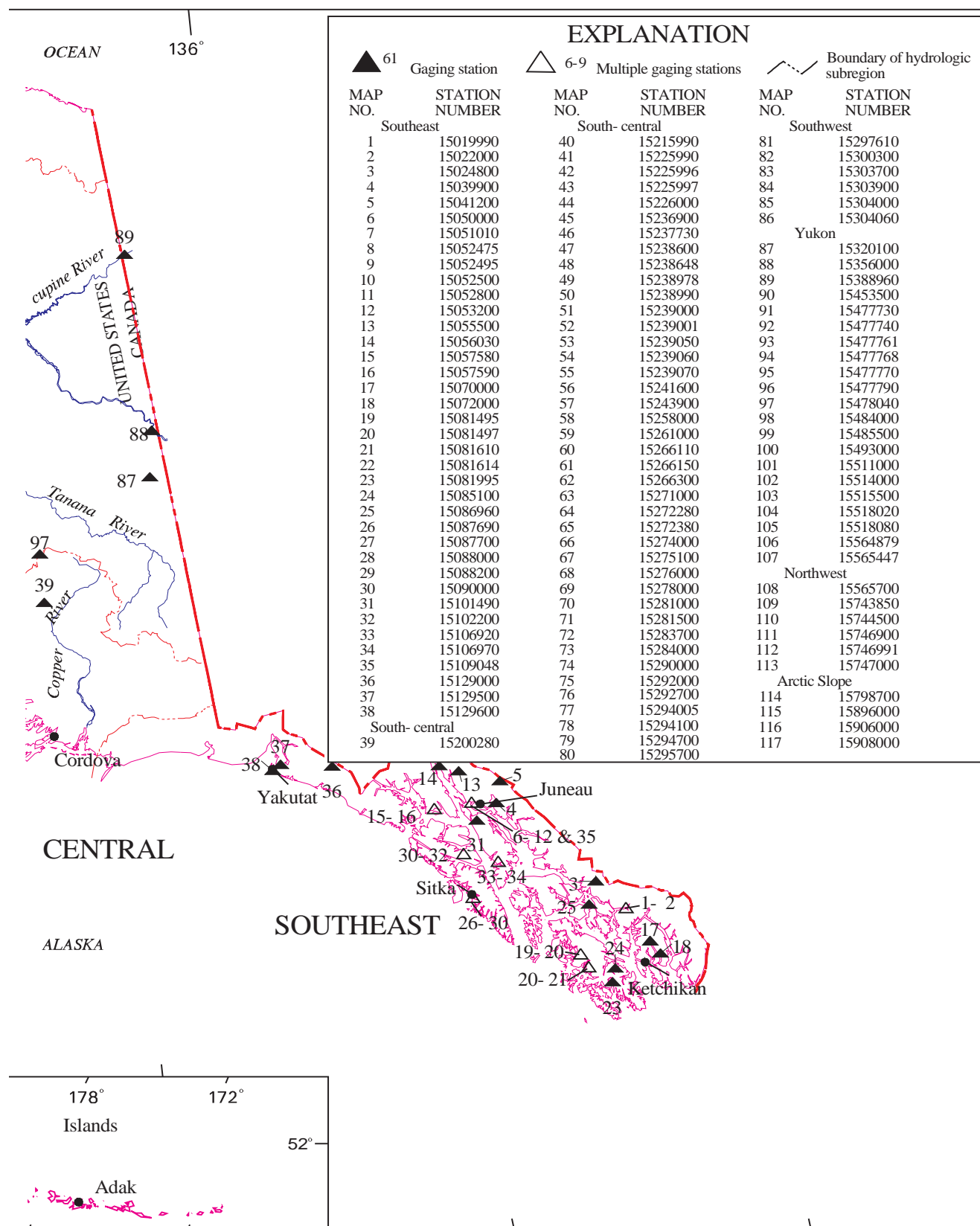


Figure 1. Locations of gaging stations.



15019990 TYEE LAKE OUTLET NEAR WRANGELL

LOCATION.--Lat 56°12'00", long 131°30'24", in SE¹/₄ SW¹/₄ sec. 28, T. 65 S., R. 90 E. (Bradfield Canal A-5 quad), Hydrologic Unit 19010101, in Tongass National Forest, on left bank at outlet of Tyee Lake, 1.5 mi south of Bradfield Canal and 37 mi southeast of Wrangell, Alaska.

DRAINAGE AREA.--14.7 mi².

PERIOD OF RECORD.--October 1979 to September 1981 and June 1992 to current year. Records for November 1922 to September 1927 and August 1963 to October 1969, published as Tyee Creek at Mouth near Wrangell (station 15020100) are not equivalent owing to inflow between sites.

GAGE.--Water-stage recorder. Elevation of gage is 1,370 ft above sea level from topographic map. Prior to June 9, 1992, at site 500 ft downstream at datum 13.66 ft lower.

REMARKS.--Records fair, except for estimated daily discharges and discharges below 10 ft³/s, which are poor. Water for power generation is diverted from Tyee Lake and discharged into Bradfield Canal. Diversion to hydropower plant began February 1984, and is not included in the discharge records.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	138	19	36	e.00	e.00	e.00	e.00	e.00	e500	263	137	403
2	110	26	74	e.00	e.00	e.00	e.00	e.00	e400	257	136	529
3	86	125	68	e.00	e.00	e.00	e.00	e.00	e320	251	125	554
4	65	142	51	15	e.00	e.00	e.00	e.00	e300	298	112	561
5	56	116	45	23	e.00	e.00	e.00	e.00	e320	327	99	486
6	66	91	61	32	e.00	e.00	e.00	e.00	e330	370	90	455
7	112	73	48	27	e.00	e.00	e.00	e.00	e340	461	83	362
8	156	54	32	26	e.00	e.00	e.00	e.00	e350	470	72	285
9	151	37	20	22	e.00	e.00	e.00	e.00	e370	487	66	226
10	124	23	12	17	e.00	e.00	e.00	e.00	e340	457	61	175
11	118	15	7.7	12	e.00	e.00	e.00	e.15	e280	383	59	131
12	138	11	4.6	7.6	e.00	e.00	e.00	e.22	e260	321	55	106
13	211	8.2	2.4	5.2	e.00	e.00	e.00	e.32	305	319	54	87
14	205	5.4	.83	3.4	e.00	e.00	e.00	e.50	334	326	56	68
15	229	3.4	e.00	2.1	e.00	e.00	e.00	e.80	334	302	59	53
16	228	1.9	e.00	1.4	e.00	e.00	e.00	e1.5	322	271	56	42
17	202	1.5	e.00	1.1	e.00	e.00	e.00	e2.5	316	268	50	39
18	176	.89	e.00	1.1	e.00	e.00	e.00	e4.0	315	266	41	72
19	174	.49	e.00	.90	e.00	e.00	e.00	e7.0	339	261	32	111
20	160	.62	e.00	.52	e.00	e.00	e.00	e11	467	278	35	141
21	143	3.3	e.00	.24	e.00	e.00	e.00	e20	551	308	65	182
22	192	76	e.00	e.00	e.00	e.00	e.00	e16	494	327	83	451
23	237	180	e.00	e.00	e.00	e.00	e.00	e28	436	320	97	628
24	212	185	e.00	e.00	e.00	e.00	e.00	e44	391	288	128	496
25	170	166	e.00	e.00	e.00	e.00	e.00	e75	361	253	185	460
26	130	137	e.00	e.00	e.00	e.00	e.00	e120	322	222	295	386
27	95	107	e.00	e.00	e.00	e.00	e.00	e155	297	199	470	333
28	69	78	e.00	e.00	e.00	e.00	e.00	e195	312	180	424	283
29	48	53	e.00	e.00	---	e.00	e.00	e250	308	162	323	297
30	32	35	e.00	e.00	---	e.00	e.00	e225	277	154	264	551
31	24	---	e.00	e.00	---	e.00	---	e440	---	142	296	---
TOTAL	4257	1774.70	462.53	197.56	0.00	0.00	0.00	1595.99	10591	9191	4108	8953
MEAN	137	59.2	14.9	6.37	.000	.000	.000	51.5	353	296	133	298
MAX	237	185	74	32	.00	.00	.00	440	551	487	470	628
MIN	24	.49	.00	.00	.00	.00	.00	.00	260	142	32	39
AC-FT	8440	3520	917	392	.00	.00	.00	3170	21010	18230	8150	17760

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2001, BY WATER YEAR (WY)#

MEAN	165	50.5	9.91	1.19	.030	.000	3.53	76.0	265	187	112	171
MAX	264	108	38.4	6.37	.28	.000	24.8	247	367	305	216	298
(WY)	2000	1993	1998	2001	1994	1993	1993	1993	1999	1999	2000	2001
MIN	102	5.10	.000	.000	.000	.000	.000	1.58	176	55.2	28.3	41.5
(WY)	1995	1997	1995	1993	1993	1993	1994	2000	1994	1998	1994	1993

Record for 1980 and 1981 water years, prior to diversion of 1984, not included. See PERIOD OF RECORD
e Estimated

15019990 TYEE LAKE OUTLET NEAR WRANGELL--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1992 - 2001#	
ANNUAL TOTAL	37093.76		41130.78			
ANNUAL MEAN	101		113		86.2	
HIGHEST ANNUAL MEAN					113 2001	
LOWEST ANNUAL MEAN					56.5 1995	
HIGHEST DAILY MEAN	566	Aug 22	628	Sep 23	710	Oct 27 1993
LOWEST DAILY MEAN	a .00	Jan 11	b .00	Dec 15	c .00	Dec 30 1992
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 11	.00	Dec 15	.00	Dec 30 1992
MAXIMUM PEAK FLOW			670	Sep 23	d 975	Oct 26 1993
MAXIMUM PEAK STAGE			25.52	Sep 23	28.62	Oct 26 1993
INSTANTANEOUS LOW FLOW				c		c
ANNUAL RUNOFF (AC-FT)	73580		81580		62480	
10 PERCENT EXCEEDS	301		334		278	
50 PERCENT EXCEEDS	15		32		26	
90 PERCENT EXCEEDS	.00		.00		.00	

PRIOR TO DIVERSION OF 1984

SUMMARY STATISTICS	WATER YEARS 1980 - 1981	
ANNUAL MEAN	179	
HIGHEST ANNUAL MEAN	213	1981
LOWEST ANNUAL MEAN	146	1980
HIGHEST DAILY MEAN	1690	Oct. 7 1980
LOWEST DAILY MEAN	f 1.4	Apr. 2 1980
ANNUAL SEVEN-DAY MINIMUM	2.0	Mar. 31 1980
INSTANTANEOUS PEAK FLOW	1910	Oct. 7 1980
INSTANTANEOUS PEAK STAGE	12.72	Oct. 7 1980
ANNUAL RUNOFF (AC-FT)	130000	
10 PERCENT EXCEEDS	457	
50 PERCENT EXCEEDS	86	
90 PERCENT EXCEEDS	11	

Record for 1980 & 1981 water years, prior to diversion of 1984, not included. See PERIOD OF RECORD

a Jan. 11 to May 27, 2000, and Dec. 15 - 31, 2000

b Dec. 15 to Jan. 3, and Jan. 22 to May 10

c No flow many days during winter months most years

d From rating curve extended above 400 ft³/s

f Apr. 2-3, 1980

15022000 HARDING RIVER NEAR WRANGELL

LOCATION.--Lat 56°12'48", long 131°38'12", in SW¹/₄ SW¹/₄ sec. 22, T. 65 S., R. 89 E. (Bradfield Canal A-5 quad), Hydrologic Unit 19010101, in Tongass National Forest, on right bank 1 mi upstream from mouth on north shore of Bradfield Canal, 4 mi downstream from Fall Lake, and 34 mi southeast of Wrangell.

DRAINAGE AREA.--67.4 mi².

PERIOD OF RECORD.--August 1951 to current year.

REVISED RECORDS.--WSP 1640: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 20 ft above sea level, by barometer. Prior to September 30, 1960, at site 300 ft upstream at datum 0.12 ft lower. October 1, 1960, to August 23, 1975, at prior site and present datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug 27	1145	4480	9.34	Sept 02	0400	*4640	*9.46

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1000	377	619	346	638	170	146	432	2030	1300	1230	2200
2	552	610	1320	695	555	131	125	497	1480	1270	1220	3520
3	478	2900	623	2720	571	117	112	617	1360	1310	1090	3090
4	410	1090	426	1040	385	119	122	589	1330	1920	1140	2960
5	649	592	838	883	269	112	138	493	1390	2150	1090	e1800
6	1290	532	1140	911	214	104	129	387	1400	2100	1100	e1750
7	1370	514	521	567	190	139	121	382	1420	2290	1120	e1540
8	1420	419	363	587	169	136	119	454	1440	1920	937	e1430
9	949	338	271	501	152	130	139	461	1590	1900	1050	e1380
10	570	290	219	376	137	152	143	362	1510	1620	1050	e1320
11	1310	260	193	284	e135	352	140	425	1210	1310	1040	e1280
12	1480	269	173	227	e130	356	158	484	1240	1180	994	e1240
13	2110	263	156	208	e127	267	176	560	1580	1550	1150	e1200
14	1070	232	e150	183	131	176	160	500	1490	1840	1210	e1170
15	1420	213	e145	176	e128	156	e157	545	1400	1490	1120	e1140
16	1220	206	e140	370	e120	160	e140	562	1300	1340	1010	e1100
17	753	419	e160	431	e116	159	e180	574	1340	1510	1000	e1100
18	752	326	e148	431	e111	193	e250	544	1360	1460	826	e1200
19	1040	326	e136	425	e107	e170	e340	481	1610	1420	864	e1280
20	809	402	123	333	e102	e178	e400	480	2250	1810	1180	e1180
21	783	594	e125	301	e97	e140	e480	537	2260	1960	1550	e1700
22	2160	2040	e122	265	e88	e115	e600	1450	1580	1860	1370	e3200
23	1850	1780	e121	242	e80	e95	e710	1410	1480	1630	1350	e3900
24	956	1040	e120	331	e90	e85	e690	877	1510	1330	1540	e3200
25	555	866	150	313	e85	e90	584	690	1550	1170	1910	e2900
26	402	662	202	255	83	e110	519	729	1350	1100	2340	e2600
27	321	551	171	308	144	e150	662	884	1490	1090	3450	e2300
28	266	442	145	404	178	e190	628	1130	1870	1030	1680	e2200
29	234	326	140	269	---	170	493	1570	1470	1030	1140	e2700
30	219	283	293	215	---	157	469	1330	1210	1080	1180	e3600
31	346	---	515	310	---	151	---	2080	---	1050	1830	---
TOTAL	28744	19162	9968	14907	5332	4930	9230	22516	45500	47020	40761	61180
MEAN	927	639	322	481	190	159	308	726	1517	1517	1315	2039
MAX	2160	2900	1320	2720	638	356	710	2080	2260	2290	3450	3900
MIN	219	206	120	176	80	85	112	362	1210	1030	826	1100
MED	809	419	171	333	130	151	168	545	1480	1460	1140	1720
AC-FT	57010	38010	19770	29570	10580	9780	18310	44660	90250	93260	80850	121400
CFSM	13.8	9.48	4.77	7.13	2.83	2.36	4.56	10.8	22.5	22.5	19.5	30.3
IN.	15.86	10.58	5.50	8.23	2.94	2.72	5.09	12.43	25.11	25.95	22.50	33.77

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2001, BY WATER YEAR (WY)#

	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962
MEAN	1086	497	340	252	239	204	363	914	1383	1343	1131	1136
MAX	2152	1252	1065	819	655	510	733	1357	1896	1878	1656	2039
(WY)	1962	1970	1990	1981	1954	1986	1994	1956	1996	1972	1956	2001
MIN	610	118	102	50.6	46.7	54.8	90.0	624	960	861	601	507
(WY)	1970	1986	1984	1969	1969	1969	1954	1977	1981	1995	1993	1965

See Period of Record; partial years used in monthly statistics
e Estimated

15022000 HARDING RIVER NEAR WRANGELL--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1951 - 2001#	
ANNUAL TOTAL	289312		309250			
ANNUAL MEAN	790		847		745	
HIGHEST ANNUAL MEAN					921	1992
LOWEST ANNUAL MEAN					558	1995
HIGHEST DAILY MEAN	5640	Aug 21	3900	Sep 23	11400	Oct 14 1961
LOWEST DAILY MEAN	61	Mar 12	80	Feb 23	a35	Jan 23 1969
ANNUAL SEVEN-DAY MINIMUM	67	Mar 7	89	Feb 20	35	Jan 23 1969
MAXIMUM PEAK FLOW			4640	Sep 2	b15300	Oct 26 1993
MAXIMUM PEAK STAGE			9.46	Sep 2	c16.22	Oct 14 1961
INSTANTANEOUS LOW FLOW			d		35	Jan 23 1969
ANNUAL RUNOFF (AC-FT)	573900		613400		539400	
ANNUAL RUNOFF (CFSM)	11.7		12.6		11.0	
ANNUAL RUNOFF (INCHES)	159.68		170.68		150.10	
10 PERCENT EXCEEDS	1690		1830		1600	
50 PERCENT EXCEEDS	526		574		544	
90 PERCENT EXCEEDS	107		131		110	

See Period of Record; partial years used in monthly statistics

a From Jan. 23 to Feb. 11, 1969

b From rating curve extended above 5,000 ft³/s on basis of slope-area measurement at gage height, 13.90 ft

c At site then in use

d Not determined, see lowest daily mean

15024800 STIKINE RIVER NEAR WRANGELL
(International gaging station)

LOCATION.--Lat 56°42'29", long 132°07'49", in SE¹/₄ SE¹/₄ sec. 35, T. 59 S., R. 84 E. (Petersburg C-1 quad), Hydrologic Unit 19010201, on right bank about 10 mi upstream from mouth near Point Rothsay, 11 mi west of Alaska-British Columbia boundary, and 18 mi northeast of Wrangell.

DRAINAGE AREA.--19,920 mi², approximately.

PERIOD OF RECORD.--July 1976 to current year.

REVISED RECORDS.--WDR AK-78-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 25 ft above sea level, from topographic map.

REMARKS.--Records good, except for estimated daily discharges that are tidally affected, Oct. 26 to 30. Nov. 10 to 16, Nov. 24 to 29, Dec. 8 to 13, Apr. 4 to 13, Apr. 20 to May 1 and May 4 to 12, which are fair; and estimated daily discharges during periods of ice effect, Dec. 14 to April 1 which are poor. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80400	28900	18400	e13000	e13000	e10600	e9200	e21400	102000	145000	107000	112000
2	66700	28700	23100	e17000	e12500	e9800	e8400	21800	105000	149000	107000	124000
3	58700	42300	22500	e24000	e11800	e9300	e8400	24300	103000	150000	108000	117000
4	52400	44600	20200	e30000	e11000	e8800	e8400	e25200	100000	154000	112000	108000
5	49000	35400	21700	e25000	e10000	e8200	e8500	e23600	103000	155000	112000	88900
6	57500	30600	31100	e25000	e9500	e7800	e8600	e21800	106000	150000	112000	91600
7	71000	28600	27000	e26000	e9300	e8200	e8700	e21400	106000	145000	113000	82000
8	82200	27100	e22500	e24000	e9000	e8500	e9000	e22400	109000	137000	112000	75100
9	70200	25600	e19900	e21000	e8700	e9000	e9400	e22900	112000	130000	111000	70000
10	59700	e23600	e19900	e17000	e8600	e10000	e9500	e21300	120000	129000	111000	61700
11	59500	e22400	e19200	e13000	e8500	e12000	e9440	e21200	122000	122000	108000	56000
12	66000	e22200	e18000	e12000	e9000	e13000	e9530	e22200	121000	113000	107000	56300
13	80400	e22100	e17800	e10600	e9300	e12000	e9660	24300	137000	109000	109000	61300
14	77900	e21900	e15200	e11000	e9700	e11400	9840	25700	148000	112000	114000	61900
15	71200	e20900	e14600	e11500	e9000	e10700	9870	27400	148000	117000	116000	62100
16	68900	e19200	e13000	e11800	e8500	e10200	10000	29000	141000	130000	111000	63300
17	58000	19600	e12000	e12400	e8200	e9600	10600	30300	139000	145000	106000	67000
18	52000	19200	e11800	e13000	e8000	e9200	11600	30000	146000	149000	101000	77300
19	50400	17900	e11700	e15000	e7800	e9000	13100	28900	151000	151000	96600	79200
20	47400	17200	e11700	e14500	e7800	e8700	e13900	27900	159000	168000	94900	70200
21	45100	e17400	e11000	e14000	e7700	e8300	e14900	29400	179000	190000	98200	64000
22	51100	25500	e10400	e13500	e7600	e8000	e15700	36400	180000	201000	103000	100000
23	60000	40500	e10000	e12800	e7500	e7700	e16700	46200	168000	198000	104000	151000
24	53000	e39600	e9800	e13000	e7500	e7500	e20600	47400	160000	176000	99700	125000
25	44400	e34600	e9700	e11500	e7800	e7500	e21400	46100	155000	152000	96000	98900
26	e38700	e30200	e9600	e10500	e8300	e7600	e20500	46000	137000	138000	108000	86300
27	e35000	e26800	e9400	e11000	e9000	e8000	e21200	47100	133000	128000	141000	73100
28	e32600	e23500	e9300	e11500	e10500	e9000	e21900	54200	139000	121000	150000	66300
29	e31400	e20600	e9300	e11000	---	e10000	e21800	67600	143000	118000	120000	63200
30	e30100	18300	e10000	e10500	---	e9700	e21700	79000	142000	119000	101000	85600
31	30400	---	e11000	e10200	---	e9400	---	88400	---	111000	108000	---
TOTAL	1731300	795000	480800	476300	255100	288700	392040	1080800	4014000	4412000	3397400	2498300
MEAN	55850	26500	15510	15360	9111	9313	13070	34860	133800	142300	109600	83280
MAX	82200	44600	31100	30000	13000	13000	21900	88400	180000	201000	150000	151000
MIN	30100	17200	9300	10200	7500	7500	8400	21200	100000	109000	94900	56000
MED	57500	24600	13000	13000	8850	9000	9940	27900	138000	145000	108000	76200
AC-FT	3434000	1577000	953700	944700	506000	572600	777600	2144000	7962000	8751000	6739000	4955000
CFSM	2.80	1.33	.78	.77	.46	.47	.66	1.75	6.72	7.14	5.50	4.18
IN.	3.23	1.48	.90	.89	.48	.54	.73	2.02	7.50	8.24	6.34	4.67

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2001, BY WATER YEAR (WY)#

	MEAN	58230	25080	14070	11650	9372	10300	16850	67040	135100	134800	107500	80230
MAX	113300	58280	25780	39450	19080	42340	31960	119100	199900	163800	134200	128600	
(WY)	1987	1979	1990	1981	1977	1992	1992	1993	1992	1985	1977	1981	
MIN	30590	10010	5593	5958	5111	4719	9070	32260	103400	109100	76770	50760	
(WY)	1986	1986	1997	1978	1999	1978	1982	1982	1978	1983	1995	1986	

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1976 - 2001#
ANNUAL TOTAL	20598780	19821740	
ANNUAL MEAN	56280	54310	56030
HIGHEST ANNUAL MEAN			72870
LOWEST ANNUAL MEAN			42100
HIGHEST DAILY MEAN	204000	201000	324000
LOWEST DAILY MEAN	a6400	b7500	4000
ANNUAL SEVEN-DAY MINIMUM	6530	7670	4090
MAXIMUM PEAK FLOW		204000	351000
MAXIMUM PEAK STAGE		24.48	30.60
ANNUAL RUNOFF (AC-FT)	40860000	39320000	40590000
ANNUAL RUNOFF (CFSM)	2.83	2.73	2.81
ANNUAL RUNOFF (INCHES)	38.47	37.02	38.21
10 PERCENT EXCEEDS	134000	137000	137000
50 PERCENT EXCEEDS	30500	27400	32500
90 PERCENT EXCEEDS	9000	9000	7340

See Period of Record; partial years used in monthly statistics

a Mar. 14 to 15

b Feb. 23 to 24 and Mar. 24 to 25

e Estimated

15039900 DOROTHY LAKE OUTLET NEAR JUNEAU

LOCATION.--Lat 58°14'56", long 133°58'54", in NE¹/₄ NW¹/₄ sec. 9, T. 42 S., R. 70 E. (Taku River A-6 quad), Hydrologic Unit 19010301, City and Borough of Juneau, in Tongass National Forest, on right bank 3 mi upstream from mouth at Taku Inlet, and 16.4 mi east of Juneau.

DRAINAGE AREA.--11.0 mi².

PERIOD OF RECORD.--October 1986 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,410.78 ft above sea level.

REMARKS.--Records fair, except for discharges under 50 ft³/s and estimated discharges, which are poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft³/s and maximum (*).

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct.07	1900	*493	*11.45	Aug 27	2000	455	11.33
July 8	0030	458	11.34				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT
1	183	42	45	e19	e30	e15	e13	e17	127	213	237	279
2	146	41	45	e21	e30	e14	e12	e17	139	214	231	310
3	122	79	42	e25	e29	e13	e11	e20	154	207	227	290
4	100	83	39	e44	e27	e12	e13	e21	156	227	232	265
5	126	74	52	e50	e25	e12	e13	e22	151	270	266	282
6	297	67	62	e44	e23	e13	e12	e20	146	327	256	331
7	407	62	57	e40	e20	e14	e12	e20	148	417	233	304
8	425	56	50	e50	e18	e14	e11	e22	149	438	214	294
9	333	50	45	e46	e17	e14	e11	e22	152	403	201	245
10	260	46	40	e42	e16	e17	e11	e20	159	375	187	195
11	260	44	36	e38	e14	e21	e11	e20	154	323	175	160
12	312	48	33	e29	e13	e20	e11	e19	154	282	170	162
13	395	45	e30	e28	e17	e19	e11	e21	163	283	171	295
14	314	41	e28	e26	e20	e17	e11	e22	169	286	178	364
15	268	38	e26	e26	e19	e15	e10	e23	170	270	187	325
16	218	37	e23	e26	e17	e16	e10	e25	173	255	187	326
17	175	39	e22	e25	e15	e16	e9.8	e27	176	238	186	316
18	142	36	23	e24	e14	e15	e10	e29	179	227	185	306
19	121	34	23	e24	e13	e14	e10	e29	187	231	185	267
20	104	33	21	e22	e12	e14	e10	e30	211	259	185	250
21	92	48	20	e21	e12	e13	e10	e33	257	281	186	221
22	91	81	19	e21	e12	e12	e11	e42	256	328	180	248
23	98	94	18	e24	e12	e11	e11	e52	249	382	172	242
24	93	87	17	e24	e11	e11	e12	e54	242	377	179	224
25	82	79	17	e21	e11	e11	e13	e51	223	359	185	219
26	71	72	18	e19	e12	e11	e13	e49	200	338	211	191
27	61	65	17	e23	e15	e12	e16	e52	196	305	374	165
28	54	57	e15	e25	e16	e12	e18	61	220	266	419	145
29	49	47	e15	e22	---	e12	e18	73	223	249	350	127
30	44	45	e17	e20	---	e12	e18	83	214	256	313	184
31	44	---	e18	e24	---	e12	---	104	---	251	295	---
TOTAL	5487	1670	933	893	490	434	362.8	1100	5497	9137	6957	7532
MEAN	177	55.7	30.1	28.8	17.5	14.0	12.1	35.5	183	295	224	251
MAX	425	94	62	50	30	21	18	104	257	438	419	364
MIN	44	33	15	19	11	11	9.8	17	127	207	170	127
AC-FT	10880	3310	1850	1770	972	861	720	2180	10900	18120	13800	14940
CFSM	16.1	5.06	2.74	2.62	1.59	1.27	1.10	3.23	16.7	26.8	20.4	22.8
IN.	18.56	5.65	3.16	3.02	1.66	1.47	1.23	3.72	18.59	30.90	23.53	25.47

e Estimated

15039900 DOROTHY LAKE OUTLET NEAR JUNEAU--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001, BY WATER YEAR (WY)#

MEAN	163	49.7	36.2	21.7	20.6	17.8	19.8	87.4	214	270	253	264
MAX	243	88.7	80.8	38.1	40.8	59.2	36.9	140	267	364	342	387
(WY)	1988	1994	2000	2000	1993	1992	1994	1993	1992	2000	1990	1991
MIN	90.9	21.2	16.9	9.25	11.3	4.65	10.6	35.5	181	210	194	177
(WY)	1993	1996	1995	1997	1998	1989	1989	2001	1996	1993	1995	1992

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1987 - 2001

ANNUAL TOTAL	45642.6	40492.8	
ANNUAL MEAN	125	111	119
HIGHEST ANNUAL MEAN			141
LOWEST ANNUAL MEAN			97.6
HIGHEST DAILY MEAN	816 Jul 24	438 Jul 8	915 Sep 11 1995
LOWEST DAILY MEAN	a8.2 Mar 14	9.8 Apr 17	4.2 Mar 13 1989
ANNUAL SEVEN-DAY MINIMUM	8.6 Mar 10	10 Apr 15	4.2 Mar 10 1989
MAXIMUM PEAK FLOW		493 Oct 7	b990 Sep 10 1995
MAXIMUM PEAK STAGE		11.45 Oct 7	13.05 Sep 10 1995
INSTANTANEOUS LOW FLOW		c	c
ANNUAL RUNOFF (AC-FT)	90530	80320	85990
ANNUAL RUNOFF (CFSM)	11.3	10.1	10.8
ANNUAL RUNOFF (INCHES)	154.35	136.94	146.60
10 PERCENT EXCEEDS	313	284	285
50 PERCENT EXCEEDS	56	47	56
90 PERCENT EXCEEDS	13	12	12

a Mar. 14 to Mar. 15

b From rating curve extended above 350 ft³/s

c Not determined; see lowest daily mean

15041200 TAKU RIVER NEAR JUNEAU
(International gaging station)

LOCATION.--Lat 58°32'19", long 133°42'00", in NE¹/₄ NW¹/₄ sec. 33, T. 38 S., R. 71 E. (Taku River C-6 quad), Hydrologic Unit 19010301, City and Borough of Juneau, in Tongass National Forest, on left bank, 1.5 mi upstream from Wright River, and 31 mi northeast of Juneau.

DRAINAGE AREA.--6,600 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1987 to current year.

REVISED RECORD.--WDR AK-98-1, 1987-1997; WDR AK-00-1 1989-90 (M), 1992-95 (M).

GAGE.--Water-stage recorder. Elevation of gage is 50 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50,000 ft³/s and maximum (*).

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jun 22	0845	55,700	39.96	Aug 10	1415	*a76600	*41.85

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14000	6990	e3400	e2300	e2550	e2000	1910	4910	29300	35600	25500	20500
2	12100	6610	e3600	e2600	e2400	e1950	1860	5170	33200	37300	26300	19100
3	11600	7260	e3700	e2800	e2300	e1800	1830	5720	34000	35000	29500	17600
4	12000	7380	e3200	e3200	e2150	e1700	1930	6040	32400	34100	30900	16200
5	14300	6700	e3000	e3100	e2000	e1600	2030	5770	31100	34600	30800	16300
6	28100	6130	e4800	e3000	e1900	e1500	2020	5310	32500	33100	29800	17800
7	42600	6020	5420	e3000	e1850	e1550	2030	5140	32100	31000	30900	16900
8	31200	5900	4680	e3200	e1800	e1650	2040	5360	32600	29600	36200	19600
9	17800	5560	e4100	e2900	e1800	e1700	2100	5460	33600	27900	50100	16500
10	14600	5040	e3800	e2700	e1800	e2000	2140	5460	37400	27200	67600	13200
11	14800	4960	e3700	e2400	e1700	e2100	2170	5400	39400	26000	30500	12100
12	17800	5790	e3400	e2300	e1700	e2300	2210	5750	42700	24800	25100	11600
13	21700	5890	e3100	e2200	e1800	e2250	2320	6850	45300	24000	25400	16600
14	19700	5360	e2900	e2180	e1900	e2200	2360	7800	43600	24600	26300	24600
15	17300	4840	e2600	e2100	e1700	e2100	2410	8250	38800	25800	27400	25800
16	15300	4630	e2400	e2100	e1650	e2100	2510	8910	36700	27600	25800	22500
17	13400	4550	e2300	e2150	e1600	e2000	2670	9200	38500	28900	24300	22100
18	12000	4700	e2250	e2000	e1550	e1900	2840	9340	39600	30800	22900	22000
19	11200	4400	e2250	e2000	e1550	e1800	3180	9130	39900	34600	22500	19200
20	10700	4230	e2250	e2000	e1500	e1700	3420	9280	39600	38600	22000	16600
21	10300	4530	e2100	e1900	e1500	e1650	3660	9650	45000	41100	21500	14700
22	10300	6010	e2000	e1900	e1480	e1600	3880	10300	50500	43400	21600	15900
23	11000	7220	e1950	e2000	e1480	e1500	4060	11500	38900	43100	21300	17500
24	10900	6870	e1900	e2000	e1500	e1500	4280	11700	37300	39300	21000	15900
25	10100	6100	e1900	e1900	e1550	e1450	4530	11300	33600	35900	19300	14300
26	9190	5620	e1850	e1850	e1600	e1500	4580	11200	29500	32800	19000	13100
27	8500	5040	e1800	e2000	e1800	e1550	4580	12600	29000	30900	24000	11800
28	7990	4590	e1800	e2200	e2100	e1600	4910	17300	32500	29800	27700	10900
29	7530	e4200	e1800	e2100	---	e1700	4960	21200	35600	29300	23700	10200
30	7200	e3600	e2000	e2000	---	e1800	4860	23400	36200	28500	21000	11000
31	7070	---	e2100	e2200	---	e1900	---	24800	---	27000	21000	---
TOTAL	452280	166720	88050	72280	50210	55650	90280	299200	1100400	992200	850900	502100
MEAN	14590	5557	2840	2332	1793	1795	3009	9652	36680	32010	27450	16740
MAX	42600	7380	5420	3200	2550	2300	4960	24800	50500	43400	67600	25800
MIN	7070	3600	1800	1850	1480	1450	1830	4910	29000	24000	19000	10200
AC-FT	897100	330700	174600	143400	99590	110400	179100	593500	2183000	1968000	1688000	995900
CFSM	2.21	.84	.43	.35	.27	.27	.46	1.46	5.56	4.85	4.16	2.54
IN.	2.55	.94	.50	.41	.28	.31	.51	1.69	6.20	5.59	4.80	2.83

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2001, BY WATER YEAR (WY)#

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	11650	4700	3415	2215	1946	2651	4446	20150	34620	32160	26020	19580		
MAX	17250	8633	6613	4223	3682	10500	6815	33800	49280	41080	32450	26550		
(WY)	1992	1994	2000	2000	1992	1992	1992	1993	1992	1992	1989	1994		
MIN	6265	2488	1256	1125	1041	1359	2846	9652	23170	25040	18610	11180		
(WY)	1997	1997	1997	1988	1999	1991	2000	2001	1995	1996	1995	1992		

See Period of Record; partial years used in monthly statistics
a Result of Tulsequah River glacier dam breakout
e Estimated

15041200 TAKU RIVER NEAR JUNEAU--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1988 - 2001	
ANNUAL TOTAL	5027760		4720270			
ANNUAL MEAN	13740		12930		13690	
HIGHEST ANNUAL MEAN					16820	1992
LOWEST ANNUAL MEAN					10800	1996
HIGHEST DAILY MEAN	93100	Jul 26	67600	Aug 10	93100	Jul 26 2000
LOWEST DAILY MEAN	a1680	Mar 13	1450	Mar 25	710	Feb 12 1988
ANNUAL SEVEN-DAY MINIMUM	1710	Mar 11	1510	Feb 18	721	Feb 8 1988
MAXIMUM PEAK FLOW			b76600	Aug 10	b110000	Aug 17 1989
MAXIMUM PEAK STAGE			41.85	Aug 10	44.13	Aug 17 1989
INSTANTANEOUS LOW FLOW			c		710	Feb 12 1989
ANNUAL RUNOFF (AC-FT)	9973000		9363000		9919000	
ANNUAL RUNOFF (CFSM)	2.08		1.96		2.07	
ANNUAL RUNOFF (INCHES)	28.34		26.61		28.19	
10 PERCENT EXCEEDS	33300		33400		33500	
50 PERCENT EXCEEDS	7030		6020		7320	
90 PERCENT EXCEEDS	2180		1800		1650	

See Period of Record; partial years used in monthly statistics

a Result of Tulsequah River glacier dam breakout

b From Mar. 13 to Mar. 14

c Not determined; see lowest daily mean

15041200 TAKU RIVER NEAR JUNEAU--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1998 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: June 1999 to current year

INSTRUMENTATION.--Electronic water-temperature recorder set for 15-minute recording interval.

REMARKS.- No record from March 4-10, 14 to April 11 when the probe was out of the water. The recorder malfunctioned on October 3-4, 10-15, December 13-14, 16, 21-22, February 10, July 30, and September 14-25. Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on September 20. The September 20 temperature cross section found no variation between mean stream temperature and sensor temperature. The outburst peak of the lake dammed by Tulsequah Glacier occurred on August 10. As a result, the temperature cross section showed a variation of 1.5°C during sampling on August 10 but no variation was noted on August 11.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum recorded, 12.5°C, July 14, 1999 and July 20 and 21, 2001; minimum, 0.0°C, many days during most winters.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 12.5°C, July 20 and 21, ; minimum, 0.0°C, many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (000009)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (000095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
SEP 2001								
20...	1333	75.0	117	7.7	7.0	757	11.2	93
20...	1335	225	117	7.8	7.0	757	11.2	93
20...	1337	375	117	7.8	7.0	757	11.1	92
20...	1339	525	116	7.8	7.0	757	11.1	92
20...	1340	675	116	7.8	7.0	757	11.1	92

DATE	TIME	MEDIUM CODE	SAMPLE TYPE	STREAM WIDTH (FT) (00004)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM- PLING METHOD, CODES (82398)	SAM- PLER TYPE (CODE) (84164)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MMOF HG) (00025)
OCT													
11...	1145	9	9	166	33.25	13900	20	3053	128	7.7	6.5	4.5	757
APR													
11...	1500	9	9	274	28.76	2130	20	8010	222	8.7	8.0	3.5	752
JUN													
07...	1400	9	9	753	36.33	33900	20	3053	137	7.8	--	9.0	764
28...	1343	9	9	--	36.35	33900	20	3053	122	7.7	--	8.5	765
JUL													
06...	1232	9	9	750	36.45	31100	20	3053	118	6.9	11.0	8.0	752
AUG													
10...	1610	9	9	776	41.82	73900	20	3053	90	8.0	20.5	7.0	764
11...	1125	9	9	717	35.99	28800	20	3053	100	7.9	18.5	8.0	764
SEP													
20...	1325	9	9	--	33.46	16300	20	3053	117	7.8	--	7.0	757

SOUTHEAST ALASKA

15041200 TAKU RIVER NEAR JUNEAU--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001--Continued

DATE	OXYGEN DIS- OLVED (MG/L) (00300)	OXY- GEN, DIS- OLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CAL- CIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM DIS- SOLVED (MG/L AS NA) (00930)	ANC WATER UNFL- TRD FET FIELD MG/L AS CACO3 (00410)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LINITY WAT DIS FIX END FIELD CACO3 (39036)	SUL- FATE (MG/L AS SO4) (00946)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
OCT 11...	--	--	68	20.6	4.03	1.7	58	<.70	68	56	58	12	.1
APR 11...	12.2	93	130	36.4	8.69	5.0	102	1.00	124	102	100	20	.1
JUN 07...	11.4	98	69	20.6	4.16	1.5	60	<.70	71	58	60	10	M
28...	10.6	90	62	--	--	--	51	--	55	51	51	--	--
JUL 06...	11.1	95	58	17.8	3.25	1.5	46	<.70	55	45	46	10	<.02
AUG 10...	10.6	87	47	15.0	2.42	.7	33	<.70	40	32	33	12	<.02
11...	--	--	54	16.9	2.87	1.1	45	1.20	55	45	45	9.8	<.02
SEP 20...	11.1	92	59	18.3	3.28	1.4	50	<.70	60	49	50	10	<.02

DATE	NITRO- GEN, AMMO- NIA TOTAL (MG/L AS N) (00610)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	ALUMI- NUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ALUMI- NUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BAR- IUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BAR- IUM, DIS- SOLVED (UG/L AS BA) (01005)	CAD- MIUM WATER UNFL- TRD TOTAL (UG/L AS CD) (01027)	CAD- MIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COP- PER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)
OCT 11...	.03	.047	1020	25	1	.6	43.7	27.7	.15	<.10	2	<1.0	3.7
APR 11...	<.02	.014	169	<20	M	.4	45.4	43.7	<.10	<.10	1	<1.0	1.6
JUN 07...	E.03	.180	2670	38	2	.5	69.7	24.5	.11	<.10	8	1.1	8.8
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 06...	E.01	.176	2530	34	2	.6	64.6	23.1	<.10	<.10	5	<1.0	7.0
AUG 10...	.09	.670	7630	34	7	.5	174	23.6	.31	<.10	16	1.2	25.9
11...	.03	.259	E3120	E29	3	.5	87.9	25.3	.13	<.10	7	1.4	10.3
SEP 20...	<.02	.098	E1880	28	2	.6	57.1	25.2	<.10	<.10	4	2.1	4.4

DATE	COP- PER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SIL- VER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	SIL- VER, DIS- SOLVED (UG/L AS AG) (01075)
OCT 11...	<1.0	1420	20	2	<.10	46	8.8	4	.83	<1.0	<1.0	<.10	<.1
APR 11...	<1.0	570	20	M	<.10	50	42.2	2	1.29	<1.0	<1.0	<.10	<.1
JUN 07...	1.4	4290	20	2	<.10	129	6.5	14	1.72	<1.0	<1.0	<.10	<.1
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 06...	<1.0	3770	<10	3	<.10	111	5.2	8	.84	<1.0	<1.0	<.10	<.1
AUG 10...	<1.0	11800	<10	8	<.10	348	8.3	23	.79	<1.0	<1.0	.11	<.1
11...	<1.0	4850	<10	E3	<.10	148	6.9	10	.82	<1.0	<1.0	<.10	<.1
SEP 20...	<1.0	2630	<10	E2	<.10	74	6.0	4	.87	<1.0	<1.0	<.10	<.1

15041200 TAKU RIVER NEAR JUNEAU--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001--Continued

DATE	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
OCT 11...	8	<4	1.5	1.2
APR 11...	8	6	1.4	.89
JUN 07...	17	<4	--	--
28...	--	--	--	--
JUL 06...	22	4	1.1	1.1
AUG 10...	52	5	<.50	<.50
11...	19	<4	<.50	<.50
SEP 20...	14	<4	.62	.53

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	4.5	3.0	3.5	2.5	2.0	2.0	1.5	.5	1.0	.5	.0	.0
2	3.0	2.0	2.5	2.0	1.5	1.5	1.5	.5	1.0	.5	.0	.0
3	---	1.5	---	2.0	1.5	1.5	---	---	---	.5	.0	.0
4	2.5	---	---	2.0	1.5	2.0	1.0	.5	1.0	.5	.0	.0
5	2.0	1.5	1.5	1.5	1.5	1.5	1.5	.5	1.0	.5	.0	.5
6	2.0	1.5	2.0	1.5	1.0	1.5	1.0	.0	.5	.5	.0	.5
7	3.0	2.0	2.5	1.5	1.0	1.5	.5	.0	.5	.5	.0	.5
8	4.0	2.5	3.5	1.5	1.0	1.5	.5	.5	.5	.5	.5	.5
9	4.5	4.0	4.0	1.0	.0	.5	.5	.5	.5	.5	.0	.5
10	---	---	---	1.0	.0	.5	1.0	.5	.5	.5	.5	.5
11	---	---	---	2.0	1.0	1.5	1.0	.5	.5	.5	.5	.5
12	---	---	---	2.0	1.5	2.0	1.0	.5	.5	.5	.0	.5
13	---	---	---	2.0	1.5	2.0	---	---	---	.5	.5	.5
14	---	---	---	2.0	1.5	2.0	---	---	---	.5	.5	.5
15	---	---	---	1.5	1.0	1.5	.5	.0	.5	.5	.5	.5
16	4.5	4.0	4.5	1.5	.0	1.0	---	---	---	.5	.5	.5
17	4.5	4.0	4.0	1.0	.0	.5	.0	.0	.0	.5	.5	.5
18	4.0	3.5	3.5	1.0	.5	.5	.0	.0	.0	1.0	.5	.5
19	4.5	3.5	4.0	1.0	1.0	1.0	.5	.0	.0	1.0	.5	.5
20	4.5	4.0	4.0	1.0	1.0	1.0	.0	.0	.0	.5	.0	.5
21	4.5	4.0	4.0	1.5	.5	1.0	---	---	---	.5	.0	.5
22	4.0	3.5	4.0	1.5	1.0	1.5	---	---	---	1.0	.5	.5
23	4.0	3.5	4.0	1.5	1.5	1.5	.0	.0	.0	.5	.5	.5
24	4.0	4.0	4.0	1.5	1.5	1.5	.0	.0	.0	1.0	.5	.5
25	4.0	3.0	3.5	1.5	1.0	1.5	.0	.0	.0	.5	.5	.5
26	3.0	2.5	2.5	1.5	1.0	1.5	.0	.0	.0	.5	.5	.5
27	2.5	2.0	2.5	1.5	1.0	1.0	.5	.0	.0	.5	.0	.5
28	2.5	2.5	2.5	1.0	.0	1.0	.5	.0	.0	1.0	.5	.5
29	2.5	2.0	2.0	.5	.0	.0	.5	.0	.0	1.0	.5	.5
30	2.0	1.0	1.5	1.5	.5	1.0	.5	.0	.0	1.0	.5	.5
31	2.0	1.0	1.5	---	---	---	.5	.0	.5	.5	.0	.5
MONTH	---	---	---	2.5	.0	1.3	---	---	---	1.0	.0	.4

15041200 TAKU RIVER NEAR JUNEAU--Continued

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN			
	FEBRUARY				MARCH				APRIL				MAY		
1	1.0	.5	.5	1.0	.5	.5	---	---	---	6.0	5.0	5.5			
2	1.0	.5	.5	1.0	.5	.5	---	---	---	5.5	4.0	4.5			
3	1.0	.5	.5	1.0	.0	.5	---	---	---	4.0	3.5	4.0			
4	1.0	.5	.5	---	---	---	---	---	---	6.0	4.0	5.0			
5	.5	.0	.5	---	---	---	---	---	---	5.5	4.5	5.0			
6	1.0	.0	.5	---	---	---	---	---	---	6.5	5.0	5.5			
7	1.0	.5	.5	---	---	---	---	---	---	6.5	5.5	6.0			
8	1.0	.0	.5	---	---	---	---	---	---	6.5	5.5	6.0			
9	1.0	.0	.5	---	---	---	---	---	---	7.0	5.5	6.0			
10	---	---	---	---	---	---	---	---	---	7.5	6.0	6.5			
11	.5	.0	.5	1.0	.5	.5	---	---	---	8.0	6.0	7.0			
12	1.0	.5	.5	1.0	.5	.5	4.5	3.0	3.5	8.0	6.5	7.0			
13	1.0	.0	.5	1.5	.5	1.0	5.5	3.0	4.0	8.0	6.5	7.0			
14	1.0	.5	.5	---	---	---	5.0	3.0	4.0	8.0	5.5	6.5			
15	1.0	.5	.5	---	---	---	5.5	3.0	4.0	8.0	7.0	7.5			
16	1.0	.5	1.0	---	---	---	5.5	3.0	4.0	8.0	6.0	7.0			
17	1.0	.5	1.0	---	---	---	4.5	3.5	4.0	8.5	6.5	7.5			
18	1.0	.5	.5	---	---	---	5.5	3.0	4.0	8.0	6.0	7.5			
19	1.0	.5	1.0	---	---	---	5.5	4.0	4.5	8.5	6.0	7.0			
20	1.0	.5	1.0	---	---	---	5.5	3.5	4.5	8.5	6.5	7.5			
21	1.0	1.0	1.0	---	---	---	5.5	3.5	4.5	8.5	6.0	7.0			
22	1.0	.5	.5	---	---	---	4.5	4.0	4.5	9.0	7.0	8.0			
23	1.0	.0	.5	---	---	---	5.0	3.5	4.0	8.0	7.0	7.5			
24	1.0	.5	.5	---	---	---	4.0	3.5	4.0	8.5	6.5	7.5			
25	1.0	.5	.5	---	---	---	5.0	3.5	4.0	9.0	6.5	7.5			
26	1.0	.5	.5	---	---	---	5.0	3.5	4.0	10.0	7.0	8.5			
27	1.0	.5	.5	---	---	---	4.5	3.5	4.0	9.5	8.0	8.5			
28	1.0	.5	.5	---	---	---	5.5	4.0	4.5	8.5	7.5	8.0			
29	---	---	---	---	---	---	5.0	4.0	4.5	8.5	7.0	7.5			
30	---	---	---	---	---	---	6.5	4.5	5.0	8.5	7.0	8.0			
31	---	---	---	---	---	---	---	---	---	8.5	7.5	8.0			
MONTH	---	---	---	---	---	---	---	---	---	10.0	3.5	6.8			

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE				JULY			AUGUST			SEPTEMBER	
1	9.0	7.0	8.0	11.5	8.5	10.0	10.5	9.0	10.0	10.0	9.0	9.5
2	8.5	7.0	7.5	11.0	9.0	9.5	12.0	9.0	10.5	10.0	9.0	9.5
3	8.0	6.5	7.0	10.5	7.5	9.0	11.0	9.5	10.0	10.0	8.5	9.5
4	9.0	6.0	7.5	10.0	8.5	9.0	10.0	9.0	9.5	10.5	9.0	10.0
5	8.5	7.0	8.0	9.5	8.5	9.0	11.0	9.0	10.0	10.5	9.0	9.5
6	10.0	6.5	8.0	9.0	7.5	8.0	10.5	8.5	9.5	10.0	8.5	9.5
7	10.0	7.5	8.5	9.0	7.0	8.0	10.5	8.5	9.5	9.5	8.5	9.0
8	9.5	7.5	8.5	9.0	7.5	8.5	9.5	7.5	8.5	10.0	8.5	9.0
9	9.5	7.5	8.5	9.5	8.0	8.5	8.0	5.5	6.5	10.0	8.5	9.0
10	9.0	7.0	8.0	10.0	8.0	8.5	9.0	4.5	6.5	10.5	8.0	9.0
11	9.5	6.5	8.0	10.0	8.5	9.0	11.0	8.0	9.0	10.0	8.0	9.0
12	10.0	8.0	9.0	10.0	8.0	9.0	12.0	9.0	10.5	9.5	8.5	9.0
13	9.5	8.0	8.5	10.0	8.5	9.0	12.0	9.5	10.5	10.0	9.0	9.5
14	8.5	7.5	8.0	11.0	8.5	9.5	12.0	9.5	10.5	---	---	---
15	9.5	7.0	8.0	12.0	8.5	10.0	12.0	9.5	10.5	---	---	---
16	9.5	8.0	9.0	11.5	9.0	10.0	11.5	9.0	10.5	---	8.5	---
17	10.5	8.0	9.0	11.0	8.5	9.5	11.0	9.5	10.0	---	---	---
18	10.5	8.0	9.5	12.0	8.5	10.0	10.5	9.0	9.5	---	9.0	---
19	10.0	8.5	9.5	12.0	9.0	10.5	11.0	9.5	10.0	---	---	---
20	10.0	8.0	9.0	12.5	9.5	11.0	10.5	9.5	10.0	---	---	---
21	9.5	7.5	8.0	12.5	9.5	11.0	10.5	9.5	10.0	---	8.5	---
22	8.0	6.0	7.0	11.5	9.5	10.0	10.0	9.5	9.5	---	8.5	---
23	10.0	7.0	8.5	10.0	8.5	9.0	10.5	8.5	9.5	---	8.0	---
24	10.0	7.5	8.5	10.0	8.5	9.0	10.0	9.0	9.5	---	---	---
25	8.5	7.0	7.5	9.5	8.5	9.0	10.0	8.5	9.0	---	---	---
26	10.5	7.0	8.5	10.0	8.5	9.0	10.0	8.5	9.5	9.0	8.0	8.5
27	10.5	8.5	9.5	10.5	8.5	9.5	10.0	9.0	9.5	8.5	7.5	8.0
28	9.5	8.5	8.5	11.0	8.5	10.0	10.0	9.0	9.5	8.0	7.0	7.5
29	10.0	7.5	8.5	11.0	9.0	10.0	9.5	8.5	9.0	8.0	7.0	7.5
30	10.5	7.5	9.0	---	---	---	10.0	8.5	9.0	---	7.5	8.0
31	---	---	---	11.0	9.5	10.0	10.0	9.0	9.5	---	---	---
MONTH	10.5	6.0	8.4	---	---	---	12.0	4.5	9.5	---	---	---

15050000 GOLD CREEK AT JUNEAU

LOCATION.--Lat 58°18'25", long 134°24'05", in NW¹/₄ NE¹/₄ sec. 23, T. 41 S., R. 67 E. (Juneau B-2 SE quad), City and Borough of Juneau, Hydrologic Unit 19010301, on left bank, 150 ft upstream from Alaska Electric Light and Power Company dam and diversion, 0.5 mi northeast of Juneau, and 1 mi upstream from mouth at Gastineau Channel.

DRAINAGE AREA.--9.76 mi².

PERIOD OF RECORD.--July 1916 to December 1920 (monthly discharge only), October 1946 to September 1948, October 1949 to September 1982. Annual maximums, water years 1991, 1994, 1996. October 1997 to current year.

REVISED RECORDS.--WSP 1372: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 245 ft above sea level, from topographic map. July 20, 1916 to December 31, 1920, at site 50 ft upstream at different datum. September 11, 1946 to September 30, 1948, nonrecording gage at site 0.7 mi downstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Water may be diverted about 0.5 mi upstream and three wells, located upstream from the gage in Last Chance Basin, pump water for municipal use and may decrease flow during winter periods.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
*Oct 12	1830	1180	4.92	No other peak greater than base discharge			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	36	29	19	119	15	e4.9	18	241	203	207	133
2	24	41	28	26	78	13	e4.7	20	222	216	179	324
3	22	147	25	167	59	13	e5.1	36	217	191	168	176
4	19	68	25	76	44	12	5.8	36	239	266	222	156
5	134	44	187	51	36	11	6.0	27	216	350	187	389
6	330	36	116	48	30	12	e5.9	22	201	456	146	291
7	259	37	60	51	28	14	e5.5	24	214	566	135	325
8	182	33	39	89	24	13	e5.1	40	223	422	125	240
9	274	28	30	58	23	14	5.9	69	234	318	102	157
10	190	25	26	42	19	20	e5.6	35	245	323	95	110
11	484	47	24	34	19	31	e5.4	30	195	237	90	85
12	515	91	22	30	18	21	e5.2	32	188	213	94	159
13	417	44	19	28	18	16	e5.0	43	223	357	110	600
14	264	33	17	27	17	14	e4.8	41	212	299	118	385
15	261	30	16	32	16	13	e4.9	42	209	236	112	217
16	187	29	16	32	15	12	e5.3	49	204	212	99	259
17	136	53	15	38	15	11	5.9	54	211	186	106	226
18	102	34	15	44	14	10	7.4	54	220	179	145	182
19	78	32	15	45	14	9.5	8.4	46	246	189	132	187
20	71	56	14	37	13	8.9	8.9	44	306	228	137	230
21	74	223	14	34	13	8.4	10	67	315	233	121	166
22	123	292	13	34	13	7.5	11	123	251	364	103	199
23	164	181	13	42	12	7.0	13	143	230	361	85	170
24	114	126	13	36	12	6.2	15	109	211	289	102	149
25	81	91	13	30	11	6.2	15	79	182	286	93	158
26	59	77	13	27	13	6.0	15	68	176	258	122	122
27	45	58	13	44	29	5.8	24	90	239	190	315	109
28	36	43	12	42	19	5.8	24	129	330	154	150	87
29	30	33	12	32	---	e5.5	20	166	252	189	159	73
30	29	30	18	27	---	e5.3	19	173	205	194	157	263
31	46	---	22	49	---	e5.1	---	225	---	191	162	---
TOTAL	4779	2098	894	1371	741	352.2	281.7	2134	6857	8356	4278	6327
MEAN	154	69.9	28.8	44.2	26.5	11.4	9.39	68.8	229	270	138	211
MAX	515	292	187	167	119	31	24	225	330	566	315	600
MIN	19	25	12	19	11	5.1	4.7	18	176	154	85	73
MED	114	44	17	37	18	11	5.9	46	221	236	125	179
AC-FT	9480	4160	1770	2720	1470	699	559	4230	13600	16570	8490	12550

e Estimated

15050000 GOLD CREEK AT JUNEAU-Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2001, BY WATER YEAR (WY)#

MEAN	158	83.3	36.8	21.8	14.5	12.6	24.7	125	225	227	188	184
MAX	349	206	202	170	81.4	137	91.7	220	307	364	374	302
(WY)	2000	1947	2000	1981	1977	1947	1947	1948	1964	1975	1961	1999
MIN	62.6	18.1	6.22	1.71	.48	.055	3.78	64.5	134	130	85.4	73.7
(WY)	1952	1976	1956	1974	1972	1974	1954	1920	1981	1982	1968	1978

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1916 - 2001#
--------------------	------------------------	---------------------	--------------------------

ANNUAL TOTAL	46068.5	38468.9	
ANNUAL MEAN	126	105	109
HIGHEST ANNUAL MEAN			155
LOWEST ANNUAL MEAN			77.5
HIGHEST DAILY MEAN	869 Jul 24	600 Sep 13	1830 Aug 12 1961
LOWEST DAILY MEAN	3.1 Mar 14	4.7 Apr 2	a.00 Mar 4 1951
ANNUAL SEVEN-DAY MINIMUM	3.3 Mar 10	5.2 Apr 10	.00 Mar 4 1951
MAXIMUM PEAK FLOW		1180 Oct 12	2950 Sep 25 1996
MAXIMUM PEAK STAGE		4.92 Oct 12	8.14 Sep 25 1996
INSTANTANEOUS LOW FLOW		b	a.00 Mar 4 1951
ANNUAL RUNOFF (AC-FT)	91380	76300	78830
10 PERCENT EXCEEDS	302	251	262
50 PERCENT EXCEEDS	79	49	68
90 PERCENT EXCEEDS	7.4	11	5.0

See Period of Record; partial years used in monthly statistics

a No flow at times during some winters

b Not determined, see lowest daily discharge

15051010 SALMON CREEK NEAR JUNEAU

LOCATION.--Lat 58°19'57", long 134°27'57", in NE¹/₄ SE¹/₄ NW¹/₄ sec. 9, T. 41 S., R. 67 E. (Juneau B-2 SE quad), City and Borough of Juneau, Hydrologic Unit 19010301, in Tongass National Forest, on left bank, about 0.3 mi upstream from mouth and 2.5 mi northwest of Juneau.

DRAINAGE AREA.--9.69 mi².

PERIOD OF RECORD.--October 1990 to current year. Daily discharge record previously collected 0.5 mi upstream at station number 15051008 "above canyon mouth" during water-years 1982-90. Drainage area, 9.50 mi².

REVISED RECORDS.--WDR AK 93-1: 1991 (m).

GAGE.--Water-stage recorder. Elevation of gage is 30 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges which are poor. Flow regulated by Salmon Creek Reservoir 2.5 mi upstream. Diversions upstream for off-stream hydropower plant; outflow from the plant goes into Gastineau Channel and is not included in the discharge records. Diversions upstream into Twin Lakes via a pipeline are also not included in the discharge records.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	22	e16	17	73	18	9.4	15	65	45	35	36
2	17	20	16	21	42	14	9.2	18	60	48	31	86
3	16	37	15	81	33	13	9.5	42	61	43	27	46
4	15	25	17	38	27	11	11	37	67	53	36	43
5	48	21	163	23	23	11	10	26	57	60	33	79
6	117	19	68	25	19	13	9.9	19	52	100	26	68
7	81	21	42	25	18	17	9.7	18	53	110	24	69
8	59	18	34	36	16	13	9.9	34	55	83	23	57
9	71	16	28	25	15	21	9.8	52	61	66	19	42
10	64	15	25	e19	13	34	9.3	27	64	68	17	34
11	199	31	23	e18	e12	45	9.5	24	48	55	16	29
12	140	52	21	18	12	28	10	24	45	49	16	36
13	130	25	18	18	17	20	10	27	55	79	16	173
14	87	20	e16	19	13	16	9.5	24	50	65	17	102
15	82	19	e16	28	e11	15	9.3	25	49	53	16	62
16	55	18	e15	26	e10	15	9.3	26	51	46	15	75
17	41	31	15	28	e9.5	13	10	26	54	41	18	60
18	32	21	16	29	e9.0	12	12	20	55	38	25	52
19	29	21	14	27	e8.4	9.5	10	17	59	37	28	50
20	27	26	13	22	e8.3	e8.5	10	17	74	42	33	64
21	28	69	12	21	e8.3	e7.6	11	24	71	43	28	47
22	45	102	e11	22	e7.9	e6.9	12	41	58	69	21	51
23	70	58	e11	30	e7.7	e6.3	14	42	56	63	16	43
24	43	44	11	24	e7.6	e5.7	16	31	50	53	17	40
25	31	31	e10	21	e7.5	e5.9	15	29	43	56	16	42
26	26	28	e10	20	17	9.4	15	27	43	51	20	34
27	23	24	e10	38	55	10	26	33	59	38	71	30
28	20	21	10	34	27	10	23	40	77	33	35	27
29	17	18	11	24	---	10	16	53	54	34	46	25
30	18	17	19	20	---	9.8	15	54	45	33	42	60
31	24	---	21	40	---	9.8	---	65	---	32	41	---
TOTAL	1674	890	727	837	527.2	438.4	360.3	957	1691	1686	824	1662
MEAN	54.0	29.7	23.5	27.0	18.8	14.1	12.0	30.9	56.4	54.4	26.6	55.4
MAX	199	102	163	81	73	45	26	65	77	110	71	173
MIN	15	15	10	17	7.5	5.7	9.2	15	43	32	15	25
AC-FT	3320	1770	1440	1660	1050	870	715	1900	3350	3340	1630	3300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2001, BY WATER YEAR (WY)#

MEAN	64.1	30.0	27.3	18.3	22.4	17.3	25.0	50.1	56.1	46.1	36.4	63.3
MAX	131	76.9	69.5	33.5	45.0	39.0	38.6	71.3	82.9	69.0	66.5	108
(WY)	1999	1994	2000	1992	1992	1992	1994	1992	1991	1997	1991	1991
MIN	36.2	16.3	12.7	9.65	9.16	9.38	12.0	29.7	35.9	22.7	18.2	41.0
(WY)	1997	1991	1997	1997	1999	1997	2001	1996	1995	1993	1994	1997

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR			FOR 2001 WATER YEAR			WATER YEARS 1991 - 2001#		
ANNUAL TOTAL	12934.5			12273.9					
ANNUAL MEAN	35.3			33.6			38.1		
HIGHEST ANNUAL MEAN							48.6		
LOWEST ANNUAL MEAN							29.7		
HIGHEST DAILY MEAN	229	Jul	24	199	Oct	11	954	Oct	20 1998
LOWEST DAILY MEAN	7.1	Mar	11	5.7	Mar	24	5.7	Mar	24 2001
ANNUAL SEVEN-DAY MINIMUM	7.2	Mar	9	7.2	Mar	20	6.8	Mar	4 1998
MAXIMUM PEAK FLOW				302	Dec	5	1930	Sep	25 1996
MAXIMUM PEAK STAGE				2.97	Dec	5	a4.65	Sep	25 1996
ANNUAL RUNOFF (AC-FT)	25660			24350			27600		
10 PERCENT EXCEEDS	71			65			73		
50 PERCENT EXCEEDS	27			26			28		
90 PERCENT EXCEEDS	10			10			10		

See Period of Record
a From flood marks
e Estimated

15052475 JORDAN CREEK BELOW EGAN DRIVE NEAR AUKE BAY

LOCATION.--Lat 58°21'59", long 134°34'34", in SW¹/₄ SW¹/₄ SE¹/₄ sec. 30, T. 40 S., R. 66 (Juneau B-2 SW quad), Hydrologic Unit 19010301, City and Borough of Juneau on right bank at downstream side of footbridge, 50 ft downstream from Egan Drive, 0.4 mi southeast of intersection of Egan Drive and Mendenhall Loop Road and 3 mi east of Auke Bay Post Office.

DRAINAGE AREA.--2.60 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1997 to current year. Prior to October 1996, published as miscellaneous site 15052482 Jordan Creek at Trout Street Bridge near Auke Bay, at site about 500 ft downstream at different datum.

GAGE.--Water-stage recorder. Datum of gage is 19.80 ft above sea level, determined by levels survey.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTEREMES OUTSIDE PERIOD OF DAILY RECORD.--Flood of September 25, 1996, reached a stage of 4.34 ft, site and datum then in use, from floodmarks, discharge 140 ft³/s; no flow observed March 2, 1989, March 5, 1996, and January 15, 1997.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	6.0	7.0	3.2	9.7	4.4	e2.5	2.7	8.1	1.4	3.2	2.1
2	5.5	5.8	7.5	3.5	7.2	3.4	e2.4	3.4	7.9	1.3	2.8	10
3	5.4	9.7	6.6	14	7.7	2.9	e2.3	8.6	9.8	1.2	2.5	4.1
4	5.0	7.3	7.5	6.7	6.3	2.7	e2.7	9.5	8.6	1.8	2.9	4.3
5	8.2	5.7	35	5.2	5.6	2.6	e2.6	7.0	7.3	3.3	2.6	9.2
6	28	5.8	18	6.9	5.0	4.1	e2.4	5.3	6.5	8.2	e2.3	11
7	18	6.6	12	6.4	4.7	5.4	e2.3	5.1	5.9	5.3	e2.2	8.9
8	26	5.6	11	6.8	4.3	4.6	e2.5	6.2	5.4	9.5	e1.9	7.6
9	14	5.1	8.9	5.5	3.8	6.7	e2.3	10	5.3	5.5	e1.6	5.4
10	14	4.9	7.9	4.5	e3.5	12	1.4	7.9	5.3	4.3	1.3	4.4
11	27	7.1	7.1	4.1	e3.1	13	1.3	6.5	4.5	3.3	1.2	3.9
12	22	10	6.2	3.8	3.8	8.4	1.6	6.0	3.9	3.0	1.0	4.0
13	33	6.7	e5.5	4.4	7.1	6.4	1.5	6.1	3.9	4.1	.89	17
14	21	5.9	e5.2	5.2	6.0	5.6	1.3	5.7	3.6	4.5	.79	11
15	20	5.8	e4.9	8.2	4.5	5.2	1.2	5.3	3.5	3.4	.71	6.4
16	15	5.5	e4.6	7.8	e4.1	6.9	1.2	5.2	3.1	2.8	.63	12
17	12	10	e4.7	8.2	e3.2	5.7	1.3	5.2	2.8	2.4	.57	8.6
18	10	7.9	8.5	7.3	e2.9	4.6	1.5	5.4	2.7	2.1	.88	7.6
19	10	7.8	3.7	6.1	e2.6	4.4	1.4	5.1	2.5	1.8	1.6	6.6
20	9.6	7.3	3.2	5.2	e2.5	4.2	1.3	5.3	2.4	1.6	1.5	14
21	10	10	e2.5	5.1	e2.4	3.5	1.3	6.5	2.5	1.5	.94	8.4
22	10	17	e2.4	5.1	e2.3	3.2	1.3	8.1	2.6	12	.77	9.6
23	10	19	e2.3	7.4	e2.1	e3.2	1.5	9.0	2.6	25	.67	9.5
24	9.7	15	e2.3	6.6	e2.0	e3.0	1.8	8.8	2.3	8.3	.64	7.9
25	8.3	11	2.4	5.3	3.0	e3.1	1.8	6.7	2.0	10	.57	7.0
26	7.4	9.8	2.4	5.0	7.5	e3.0	1.8	6.1	1.9	8.0	.71	6.1
27	6.7	8.9	2.3	8.4	21	e3.1	2.8	6.6	1.7	5.7	8.5	5.4
28	6.1	8.0	2.3	9.7	9.2	e3.4	4.6	6.9	1.7	4.7	2.5	4.9
29	5.7	7.1	2.2	6.4	---	e2.9	3.1	7.5	1.6	4.4	2.2	4.6
30	6.4	6.5	3.3	5.4	---	e2.7	2.8	8.2	1.5	4.0	2.4	11
31	6.3	---	3.8	8.1	---	e2.6	---	8.3	---	3.6	2.4	---
TOTAL	396.1	248.8	203.2	195.5	147.1	146.9	59.8	204.2	123.4	158.0	55.37	232.5
MEAN	12.8	8.29	6.55	6.31	5.25	4.74	1.99	6.59	4.11	5.10	1.79	7.75
MAX	33	19	35	14	21	13	4.6	10	9.8	25	8.5	17
MIN	5.0	4.9	2.2	3.2	2.0	2.6	1.2	2.7	1.5	1.2	.57	2.1
AC-FT	786	493	403	388	292	291	119	405	245	313	110	461
CFSM	4.91	3.19	2.52	2.43	2.02	1.82	.77	2.53	1.58	1.96	.69	2.98
IN.	5.67	3.56	2.91	2.80	2.10	2.10	.86	2.92	1.77	2.26	.79	3.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2001, BY WATER YEAR (WY)#

	1997	1998	1999	2000	2001
MEAN	16.9	8.12	12.1	6.76	2.13
MAX	22.2	11.2	20.8	11.3	5.25
(WY)	1999	2000	2000	1999	2001
MIN	11.1	4.21	2.67	3.52	.47
(WY)	1998	1999	1999	1998	1999

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1997 - 2001#
ANNUAL TOTAL	2816.08	2170.87	
ANNUAL MEAN	7.69	5.95	7.97
HIGHEST ANNUAL MEAN			9.87
LOWEST ANNUAL MEAN			5.95
HIGHEST DAILY MEAN	49 Sep 17	35 Dec 5	129 Dec 28 1999
LOWEST DAILY MEAN	.23 Mar 13	a.57 Aug 17	b.00 Mar 3 1999
ANNUAL SEVEN-DAY MINIMUM	.40 Mar 10	.78 Aug 12	.00 Mar 3 1999
MAXIMUM PEAK FLOW		58 Jul 23	149 Dec 28 1999
MAXIMUM PEAK STAGE		5.90 Jul 23	7.59 Dec 28 1999
INSTANTANEOUS LOW FLOW		c.54 Aug 16	b.00 Mar 3 1999
ANNUAL RUNOFF (AC-FT)	5590	4310	5780
ANNUAL RUNOFF (CFSM)	2.96	2.29	3.07
ANNUAL RUNOFF (INCHES)	40.29	31.06	41.67
10 PERCENT EXCEEDS	16	10	17
50 PERCENT EXCEEDS	5.8	5.2	5.2
90 PERCENT EXCEEDS	1.4	1.6	1.2

See Period of Record; partial year used in monthly statistics
a Aug. 17 and 25
b Mar. 3 to Mar. 9
c Aug. 16-17, and 25
e Estimated

15052475 JORDAN CREEK BELOW EGAN DRIVE NEAR AUKE BAY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1997 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: July 1999 to current year.

INSTRUMENTATION.--Electronic water-temperature recorder with 15-minute recording interval started on July 15, 1999.

REMARKS.-- Records represent water temperature at the sensor within 0.5°C.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum, 13.0°C, July 1, 2001; minimum, 0°C, many days during winters.

EXTREMES FOR CURRENT PERIOD.--

WATER TEMPERATURE: Maximum, 13.0°C, July 1; minimum, 0°C, many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	STREAM WIDTH (FT) (000004)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (000009)	GAGE HEIGHT (FEET) (000065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (000061)	TEMPER- ATURE WATER (DEG C) (00010)
MAR						
07...	1400	10.8	10.1	3.63	5.9	2.0
07...	1401	10.8	8.10	3.63	5.9	2.0
07...	1402	10.8	6.10	3.63	5.9	2.0
07...	1403	10.8	4.10	3.63	5.9	2.0
07...	1404	10.8	2.10	3.63	5.9	2.0

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	5.5	3.5	4.0	5.0	4.0	4.5	3.0	1.5	2.5	2.5	1.5	2.0
2	4.0	3.0	3.5	5.0	4.0	4.5	3.5	3.0	3.5	2.5	2.0	2.0
3	3.5	3.0	3.0	5.5	4.5	5.0	3.5	3.0	3.5	2.0	1.5	2.0
4	3.5	2.5	3.0	5.0	3.0	4.0	3.5	3.5	3.5	2.5	2.0	2.5
5	6.0	3.5	4.5	3.5	3.0	3.0	4.0	3.5	3.5	2.5	1.5	2.0
6	7.0	6.0	6.5	4.0	3.5	3.5	4.5	4.0	4.0	2.5	1.5	2.0
7	7.5	7.0	7.5	4.5	4.0	4.5	4.0	4.0	4.0	3.5	2.5	3.0
8	7.0	6.0	6.5	4.5	4.0	4.5	4.0	2.0	3.0	3.5	3.0	3.0
9	6.5	6.5	6.5	4.0	3.0	3.5	2.0	1.0	1.5	3.0	1.5	2.5
10	7.0	6.5	6.5	3.0	2.5	3.0	2.0	1.5	2.0	1.5	.5	1.0
11	7.0	6.0	6.5	4.0	3.0	3.5	2.5	2.0	2.0	1.5	.5	1.0
12	8.0	7.0	7.5	5.0	4.0	4.5	2.0	.5	1.0	1.0	.5	.5
13	8.0	7.0	7.5	4.5	4.0	4.5	.5	.0	.0	1.5	.5	1.0
14	7.0	6.5	6.5	4.5	4.0	4.5	.0	.0	.0	2.0	1.5	2.0
15	7.0	6.5	6.5	4.5	3.5	4.5	.0	.0	.0	2.0	1.5	2.0
16	7.0	6.5	6.5	4.0	3.0	3.5	.0	.0	.0	2.5	2.0	2.0
17	6.5	5.5	6.0	4.5	4.0	4.0	.0	.0	.0	3.0	2.5	2.5
18	6.0	5.0	5.5	4.0	3.5	3.5	1.0	.0	.0	3.0	2.5	3.0
19	6.5	6.0	6.0	4.0	3.5	4.0	1.5	1.0	1.5	3.5	3.0	3.0
20	6.0	5.5	6.0	5.0	4.0	4.5	1.0	.5	.5	3.0	2.0	2.0
21	6.0	5.5	5.5	5.5	5.0	5.5	.5	.0	.0	3.0	2.0	3.0
22	6.5	5.5	6.0	5.5	5.0	5.5	.0	.0	.0	3.5	3.0	3.5
23	6.5	6.0	6.5	5.0	4.5	4.5	.0	.0	.0	3.5	2.0	3.0
24	6.5	6.0	6.0	4.5	4.5	4.5	.5	.0	.0	2.5	2.0	2.0
25	6.0	5.0	5.5	4.5	4.0	4.5	1.5	.5	1.0	2.5	2.0	2.5
26	5.0	4.0	4.5	4.5	4.5	4.5	1.5	1.5	1.5	3.0	2.5	2.5
27	5.0	4.0	4.5	4.5	4.5	4.5	1.5	1.0	1.5	3.0	3.0	3.0
28	5.0	4.0	4.5	4.5	3.0	4.0	1.5	1.0	1.5	3.0	2.5	2.5
29	4.0	2.5	2.5	3.0	2.0	2.5	1.5	1.0	1.5	3.0	2.5	2.5
30	4.0	2.5	3.0	3.0	2.5	3.0	2.0	1.5	2.0	3.0	2.0	2.5
31	5.0	4.0	4.5	---	---	---	2.0	1.5	2.0	3.5	1.5	2.5
MONTH	8.0	2.5	5.5	5.5	2.0	4.1	4.5	.0	1.5	3.5	.5	2.3

15052475 JORDAN CREEK BELOW EGAN DRIVE NEAR AUKE BAY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	3.5	3.0	3.5	1.5	.5	1.0	---	---	---	6.5	5.0	6.0
2	3.5	3.0	3.5	1.5	.5	1.0	---	---	---	5.5	4.0	4.5
3	3.5	2.5	3.0	2.0	1.0	1.5	---	---	---	4.0	4.0	4.0
4	2.5	2.0	2.5	1.5	.0	1.0	---	---	---	5.0	3.0	4.0
5	2.5	1.5	2.0	1.5	1.0	1.5	---	---	---	5.0	3.0	4.0
6	1.5	.5	1.0	2.0	1.5	1.5	---	---	---	6.5	3.0	5.0
7	1.5	1.0	1.0	2.0	1.5	2.0	---	---	---	6.0	4.5	5.0
8	1.5	.5	1.5	2.5	1.5	2.0	---	---	---	5.0	4.0	4.5
9	1.0	.0	.5	2.5	1.5	2.0	---	---	---	5.0	4.0	4.5
10	.5	.0	.0	1.5	1.0	1.5	4.0	---	---	7.0	3.5	5.0
11	.0	.0	.0	2.0	1.5	2.0	4.0	2.0	3.0	7.0	5.0	6.0
12	.0	.0	.0	3.0	2.0	2.5	4.5	3.0	3.5	7.5	4.0	6.0
13	.0	.0	.0	3.0	2.0	2.5	5.0	2.5	3.5	7.0	5.5	6.5
14	.0	.0	.0	3.5	2.5	3.0	5.5	3.5	4.5	8.0	4.0	6.0
15	.0	.0	.0	3.5	2.5	3.0	5.0	2.0	3.5	8.5	6.0	7.0
16	.0	.0	.0	3.0	1.5	2.5	5.5	2.0	3.5	9.0	5.5	7.0
17	.0	.0	.0	4.0	2.5	3.0	5.0	3.0	4.0	7.5	5.5	6.5
18	.0	.0	.0	3.0	.5	2.0	6.5	4.0	5.0	8.5	5.0	7.0
19	.0	.0	.0	.5	.0	.0	7.5	4.0	5.5	8.0	5.0	6.5
20	.0	.0	.0	.0	.0	.0	7.0	3.5	5.0	7.5	5.5	6.5
21	.0	.0	.0	.0	.0	.0	7.0	4.0	5.5	7.5	5.5	6.5
22	.0	.0	.0	.0	.0	.0	6.0	4.5	5.5	6.5	5.5	6.0
23	.0	.0	.0	.0	.0	.0	6.5	4.5	5.5	6.0	5.0	5.5
24	.0	.0	.0	.0	.0	.0	5.5	5.0	5.0	8.5	5.0	6.5
25	.0	.0	.0	---	---	---	6.5	4.0	5.5	8.5	5.0	7.0
26	.0	.0	.0	---	---	---	6.0	5.0	5.5	9.5	4.0	6.5
27	.0	.0	.0	---	---	---	6.5	5.0	5.5	8.5	6.5	7.5
28	1.0	.0	.5	---	---	---	6.5	4.0	5.0	9.0	6.0	7.5
29	---	---	---	---	---	---	6.0	4.0	5.0	8.0	6.5	7.0
30	---	---	---	---	---	---	7.5	4.5	6.0	8.0	6.0	7.0
31	---	---	---	---	---	---	---	---	---	8.5	6.5	7.5
MONTH	3.5	.0	.7	---	---	---	---	---	---	9.5	3.0	6.0

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	10.0	6.5	8.0	13.0	10.0	11.0	10.0	8.0	9.0	---	---	---
2	9.0	7.0	7.5	12.0	10.0	11.0	11.0	8.5	10.0	---	---	---
3	7.0	6.5	7.0	12.0	8.5	10.5	11.0	9.0	10.0	---	---	---
4	8.5	6.0	7.5	11.5	9.5	10.5	10.0	9.0	9.5	---	---	---
5	8.0	6.5	7.5	9.5	9.0	9.5	---	---	---	---	---	---
6	9.0	6.5	8.0	9.0	8.5	9.0	---	---	---	---	---	---
7	9.0	7.0	8.0	9.0	8.5	8.5	---	---	---	---	---	---
8	10.0	6.0	8.0	9.5	8.0	8.5	---	---	---	---	---	---
9	10.0	7.5	8.5	9.5	8.0	8.5	---	---	---	---	---	---
10	9.0	7.5	8.0	9.0	8.5	8.5	---	---	---	---	---	---
11	8.0	7.0	7.5	9.0	8.0	8.5	---	---	---	---	---	---
12	8.0	7.0	7.5	9.0	8.0	8.5	---	---	---	---	---	---
13	8.0	7.0	7.5	9.0	8.0	8.5	---	---	---	---	---	---
14	9.0	6.5	8.0	10.0	8.0	9.0	---	---	---	---	---	---
15	9.0	7.5	8.0	10.0	8.5	9.0	---	---	---	---	---	---
16	10.5	7.0	9.0	10.0	8.5	9.5	---	---	---	---	---	---
17	10.0	8.5	9.0	10.0	8.5	9.5	---	---	---	---	---	---
18	11.0	8.0	9.5	10.0	8.5	9.5	---	---	---	---	---	---
19	10.5	8.5	9.5	11.0	8.0	9.5	---	---	---	---	---	---
20	10.5	8.5	9.5	12.0	9.0	10.5	---	---	---	---	---	---
21	10.5	9.0	9.5	12.0	10.0	11.0	---	---	---	---	---	---
22	10.0	8.5	9.0	11.5	10.5	11.0	---	---	---	---	---	---
23	9.0	8.0	8.5	11.0	9.5	10.5	---	---	---	---	---	---
24	10.0	7.5	9.0	9.5	9.0	9.0	---	---	---	---	---	---
25	11.0	8.5	10.0	9.0	8.5	9.0	---	---	---	---	---	---
26	11.5	8.0	10.0	9.0	8.5	8.5	---	---	---	---	---	---
27	12.5	9.0	11.0	9.0	8.0	8.5	---	---	---	---	---	---
28	12.0	10.0	11.0	9.5	8.0	8.5	---	---	---	---	---	---
29	10.5	9.0	10.0	9.5	8.0	8.5	---	---	---	---	---	---
30	12.0	9.0	10.5	9.0	8.0	8.5	---	---	---	---	---	---
31	---	---	---	9.0	8.0	8.5	---	---	---	---	---	---
MONTH	12.5	6.0	8.7	13.0	8.0	9.3	---	---	---	---	---	---

15052495 NUGGET CREEK ABOVE DIVERSION NEAR AUKE BAY

LOCATION.--Lat 58°25'25", long 134°31'25", in SE¹/₄ SE¹/₄ SW¹/₄ sec. 4, T. 40 S., R. 66 E. (Juneau B-2 NW quad), Hydrologic Unit 19010301, City and Borough of Juneau, on left bank, 1,200 ft upstream from old diversion dam, 3,000 ft upstream from mouth at Mendenhall Lake and 5.2 mi northeast of Auke Bay.

DRAINAGE AREA.-- 15.8 mi².

PERIOD OF RECORD.--March 2000 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 590 ft above sea level, from topographic map.

REMARKS.--Records fair except estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	122	55	80	47	86	31	11	36	346	361	343	270
2	99	78	79	50	63	28	12	38	313	354	344	474
3	88	273	71	146	55	27	12	55	336	314	329	275
4	76	116	70	83	48	27	12	54	310	427	415	289
5	319	83	245	63	42	26	12	40	272	609	413	518
6	643	71	134	60	39	28	12	33	276	657	288	520
7	590	70	93	62	39	30	12	34	295	726	244	474
8	391	59	77	78	35	28	12	40	328	590	236	481
9	339	51	66	60	34	30	13	56	364	513	219	266
10	276	47	64	51	29	39	12	42	380	471	198	185
11	453	70	59	46	32	61	13	46	307	372	187	147
12	810	93	54	44	34	37	13	51	321	329	214	219
13	665	60	51	42	36	25	13	78	372	447	261	925
14	402	49	e50	41	32	22	13	72	321	397	285	734
15	276	48	49	49	31	21	13	79	341	345	303	400
16	195	49	46	48	31	20	14	84	343	324	249	467
17	148	78	45	52	30	19	17	85	355	286	227	423
18	119	51	45	60	30	17	22	80	366	299	325	327
19	109	53	42	55	29	16	23	75	406	383	497	261
20	102	89	40	47	28	e15	24	74	582	458	398	289
21	99	265	38	44	28	14	27	93	554	467	365	224
22	140	406	37	44	27	14	30	160	452	763	301	305
23	197	210	36	54	26	14	33	165	432	778	234	230
24	143	146	35	45	26	14	33	116	397	662	227	190
25	106	114	35	41	26	14	32	90	325	727	206	186
26	86	100	34	40	31	14	34	90	318	676	304	144
27	72	90	33	57	61	13	53	130	506	439	769	130
28	63	80	33	52	36	12	50	173	612	330	382	112
29	55	68	33	42	---	12	41	218	437	421	391	104
30	57	73	51	39	---	12	37	224	365	474	358	237
31	62	---	59	61	---	12	---	340	---	396	318	---
TOTAL	7302	3095	1884	1703	1044	692	655	2951	11332	14795	9830	9806
MEAN	236	103	60.8	54.9	37.3	22.3	21.8	95.2	378	477	317	327
MAX	810	406	245	146	86	61	53	340	612	778	769	925
MIN	55	47	33	39	26	12	11	33	272	286	187	104
MED	140	76	50	50	32	20	14	78	350	439	303	272
AC-FT	14480	6140	3740	3380	2070	1370	1300	5850	22480	29350	19500	19450
CFSM	14.9	6.53	3.85	3.48	2.36	1.41	1.38	6.02	23.9	30.2	20.1	20.7
IN.	17.19	7.29	4.44	4.01	2.46	1.63	1.54	6.95	26.68	34.83	23.14	23.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2001, BY WATER YEAR (WY)#

MEAN	236	103	60.8	54.9	37.3	22.3	24.4	120	427	532	377	382
MAX	236	103	60.8	54.9	37.3	22.3	26.9	146	476	586	436	438
(WY)	2001	2001	2001	2001	2001	2001	2000	2000	2000	2000	2000	2000
MIN	236	103	60.8	54.9	37.3	22.3	21.8	95.2	378	477	317	327
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS

FOR 2001 WATER YEAR

WATER YEARS 2000 - 2001#

ANNUAL TOTAL	65089	
ANNUAL MEAN	178	178
HIGHEST ANNUAL MEAN		178
LOWEST ANNUAL MEAN		178
HIGHEST DAILY MEAN	925	1380
LOWEST DAILY MEAN	11	11
ANNUAL SEVEN-DAY MINIMUM	12	12
MAXIMUM PEAK FLOW	1820	2220
MAXIMUM PEAK STAGE	24.42	24.86
INSTANTANEOUS LOW FLOW	9.8	9.8
ANNUAL RUNOFF (AC-FT)	129100	129200
ANNUAL RUNOFF (CFSM)	11.3	11.3
ANNUAL RUNOFF (INCHES)	153.25	153.35
10 PERCENT EXCEEDS	438	548
50 PERCENT EXCEEDS	79	146
90 PERCENT EXCEEDS	23	23

See period of Record; partial years used in monthly statistics
e Estimated

15052500 MENDENHALL RIVER NEAR AUKE BAY

LOCATION.--Lat 58°25'47", long 134°34'22", in NW¹/₄ SE¹/₄ sec. 6, T. 40 S., R. 66 E. (Juneau B-2 NW quad.), Hydrologic Unit 19010301, at the north end of Mendenhall Lake, 1.2 mi north of Mendenhall Lake Outlet and 4.1 mi northeast of Auke Bay, and 7 mi upstream from mouth at Fritz Cove.

DRAINAGE AREA.--85.1 mi².

PERIOD OF RECORD.--May 1965 to October 1994, annual maximum, water years 1995-96, October 1996 to current year. Prior to April 15, 1983, at site 1.3 mi southeast at east end of Mendenhall Lake, same datum.

REVISED RECORDS.--WDR AK-95-1: 1981(M)

GAGE.--Water-stage recorder. Elevation of gage is 60 ft above sea level, from topographic map.

REMARKS.--Records fair except estimated daily discharges, which are poor. Streamflow is augmented and diurnal fluctuations caused by melting from Mendenhall Glacier, which covers two-thirds of the basin. GOES satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--During late summer 1961, flood flows of 27,000 ft³/s were estimated at the mouth of the Mendenhall River. For discussion of this flood, see USGS Hydrologic Atlas HA-259.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,600 ft³/s and maximum (*)::

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Jul 23	0445	5750	7.02	Sep 15	0315	*6380	*7.33
Aug 29	1200	5000	6.62				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1780	370	324	142	193	102	46	140	1010	e2850	3230	2880
2	1260	365	e303	150	195	90	42	144	1050	e2600	2970	3240
3	962	516	e280	250	191	80	40	176	1150	e2400	3170	2900
4	797	632	e300	312	176	71	43	209	1290	e2800	3230	2620
5	874	598	e500	300	159	64	46	202	1390	e3600	3270	3000
6	1800	569	e465	295	141	61	45	179	1280	e3700	2890	4090
7	3300	597	e395	290	136	68	44	166	1260	e4200	2650	3580
8	3290	583	e315	311	126	71	44	176	1270	e3400	2570	3860
9	2990	496	e272	294	115	76	48	220	1390	3170	2480	2550
10	2630	424	e250	266	e103	93	48	223	1480	3060	2390	1950
11	2270	416	e220	245	e95	140	48	214	1360	2510	2260	1850
12	2500	472	e205	228	e87	164	49	216	1390	2250	2300	1750
13	3510	427	e190	215	99	149	49	238	1530	2420	2720	3250
14	3280	378	161	195	94	130	48	254	1570	2560	3130	6030
15	2310	365	159	191	82	116	47	276	1680	2430	3170	5640
16	1660	347	149	187	73	118	48	293	1800	2430	2890	4710
17	1380	405	140	172	66	109	50	308	1860	2360	2740	4120
18	1060	357	141	169	60	100	57	310	1860	2380	2790	3460
19	909	333	137	157	55	88	64	309	1960	2610	3170	2610
20	837	338	128	137	51	77	71	308	2130	3190	3300	2480
21	804	483	121	119	48	67	81	365	2440	3540	3430	1880
22	788	777	114	110	46	60	88	437	2600	4400	3260	2050
23	934	703	110	127	44	55	96	536	2970	5410	2830	2360
24	983	690	105	131	41	52	104	573	2630	4380	2560	2090
25	876	578	102	120	39	50	108	513	2220	4440	2460	1790
26	719	529	100	113	43	49	110	469	2130	4110	2810	1450
27	574	368	97	128	82	49	126	513	2350	3260	4330	1160
28	466	247	96	157	105	50	154	607	3020	2930	4840	1080
29	395	289	94	146	---	50	153	711	e3200	3020	4770	1030
30	364	319	106	132	---	49	146	768	e3000	3470	4020	1280
31	369	---	133	138	---	49	---	863	---	3700	3470	---
TOTAL	46671	13971	6212	5927	2745	2547	2143	10916	56270	99580	96100	82740
MEAN	1506	466	200	191	98.0	82.2	71.4	352	1876	3212	3100	2758
MAX	3510	777	500	312	195	164	154	863	3200	5410	4840	6030
MIN	364	247	94	110	39	49	40	140	1010	2250	2260	1030
AC-FT	92570	27710	12320	11760	5440	5050	4250	21650	111600	197500	190600	164100
CFSM	17.7	5.47	2.35	2.25	1.15	.97	.84	4.14	22.0	37.7	36.4	32.4
IN.	20.40	6.11	2.72	2.59	1.20	1.11	.94	4.77	24.60	43.53	42.01	36.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2001, BY WATER YEAR (WY)#

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001			
MEAN	1350	351	157	113	90.9	93.1	140	648	1870	3005	3321	2683																												
MAX	2649	920	526	600	254	379	313	1227	2819	3835	4701	4100																												
(WY)	1987	1977	2000	1981	1977	1992	1994	1993	1969	1979	1990	1991																												
MIN	532	110	40.0	30.8	21.5	22.3	56.9	268	732	1939	2025	1380																												
(WY)	1969	1986	1984	1969	1969	1974	1967	1985	1985	1985	1985	1984																												

See Period of Record; partial years used in monthly summary statistics and break in record
e Estimated

15052500 MENDENHALL RIVER NEAR AUKE BAY--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1965 - 2001#	
ANNUAL TOTAL	446110		425822			
ANNUAL MEAN	1219		1167		1164	
HIGHEST ANNUAL MEAN					1547	1990
LOWEST ANNUAL MEAN					758	1985
HIGHEST DAILY MEAN	7630	Aug 22	6030	Sep 14	13700	Sep 8 1981
LOWEST DAILY MEAN	39	Mar 13	39	Feb 25	19	Mar 1 1969
ANNUAL SEVEN-DAY MINIMUM	41	Mar 10	43	Apr 2	19	Mar 5 1974
MAXIMUM PEAK FLOW			6380	Sep 15	16000	Sep 11 1995
MAXIMUM PEAK STAGE			7.33	Sep 15	a11.18	Sep 11 1995
INSTANTANEOUS LOW FLOW			37	Apr 3	b19	Mar 1 1969
ANNUAL RUNOFF (AC-FT)	884900		844600		843000	
ANNUAL RUNOFF (CFSM)	14.3		13.7		13.7	
ANNUAL RUNOFF (INCHES)	195.01		186.14		185.79	
10 PERCENT EXCEEDS	3190		3230		3210	
50 PERCENT EXCEEDS	474		378		401	
90 PERCENT EXCEEDS	75		60		48	

See Period of Record; partial years used in monthly summary statistics and break in record

a From floodmarks

b Mar. 1-3, 1969, and Mar. 7-11, 1974

15052800 MONTANA CREEK NEAR AUKE BAY

LOCATION.--Lat 58°23'53", long 134°36'34", in SE¹/₄ SW¹/₄ sec. 13, T. 40 S., R. 65 E. (Juneau B-2 NW quad.), Hydrologic Unit 19010301, On right bank 30 ft upstream from bridge on Mendenhall Loop Road, 1.2 mi upstream from mouth at Mendenhall River, 1.5 mi northeast of Auke Lake, and 3.9 mi downstream from McGinnis Creek.

DRAINAGE AREA.--14.1 mi².

PERIOD OF RECORD.-- August 1965 to September 1975, July 1983 to September 1987, Annual Maximum 1996 to 2000, November 2000 to September 2001.

REVISED RECORDS.--WDR-99-1: 1996-98 (M).

GAGE.--Water-stage recorder. Elevation of gage is 40 ft above sea level, from topographic map.

REMARKS.--Records fair, except estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	e68	53	32	152	81	18	42	164	105	108	121
2	---	e62	59	40	62	58	17	42	142	103	103	230
3	---	e95	53	124	70	46	16	135	198	91	97	118
4	---	e60	59	62	48	38	21	154	152	115	117	128
5	---	e68	868	48	38	28	25	79	131	210	137	376
6	---	e60	262	75	32	26	22	54	120	292	94	304
7	---	e70	134	58	31	43	20	44	126	452	77	268
8	---	65	108	75	28	37	21	48	122	329	69	203
9	---	54	91	54	e25	56	29	156	134	227	56	137
10	---	49	83	37	e22	149	25	69	146	182	61	100
11	---	157	77	31	e21	236	22	68	114	123	58	84
12	---	163	e69	28	e20	94	26	68	111	106	58	131
13	---	73	e56	31	e20	55	25	82	124	170	63	1300
14	---	59	e48	43	e19	41	23	64	114	154	65	481
15	---	67	e44	87	e19	36	24	66	117	123	66	175
16	---	65	e41	76	e19	50	26	e60	118	108	61	215
17	---	139	e39	67	e18	44	31	e57	122	93	58	164
18	---	77	e40	65	e18	36	52	e56	119	87	89	175
19	---	70	e42	50	e18	e24	42	e57	130	96	77	140
20	---	68	e40	39	e18	e19	39	e54	162	115	84	242
21	---	89	e37	34	e17	e16	40	e60	171	116	63	120
22	---	134	e34	38	e17	e14	40	e75	137	400	56	165
23	---	139	e28	64	e16	e14	44	e130	126	504	50	158
24	---	107	e24	48	e16	e13	40	e105	118	221	50	110
25	---	76	e23	37	e36	e12	40	77	101	302	50	90
26	---	66	e22	37	56	25	40	67	96	246	84	77
27	---	64	e22	69	194	20	75	79	116	138	295	69
28	---	60	22	86	120	19	82	95	143	109	107	63
29	---	51	21	47	---	20	47	116	110	141	252	58
30	---	47	44	36	---	19	40	132	94	140	203	196
31	---	---	51	81	---	20	---	151	---	118	248	---
TOTAL	---	2422	2594	1699	1170	1389	1012	2542	3878	5716	3056	6198
MEAN	---	80.7	83.7	54.8	41.8	44.8	33.7	82.0	129	184	98.6	207
MAX	---	163	868	124	194	236	82	156	198	504	295	1300
MIN	---	47	21	28	16	12	16	42	94	87	50	58
AC-FT	---	4800	5150	3370	2320	2760	2010	5040	7690	11340	6060	12290
CFSM	---	5.73	5.93	3.89	2.96	3.18	2.39	5.82	9.17	13.1	6.99	14.7
IN.	---	6.39	6.84	4.48	3.09	3.66	2.67	6.71	10.23	15.08	8.06	16.35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2001, BY WATER YEAR (WY)#

MEAN	158	74.3	46.2	43.2	39.1	50.2	54.3	132	164	148	160	166
MAX	285	138	112	186	121	195	88.5	185	207	213	246	263
(WY)	1975	1975	1986	1985	1971	1972	1969	1972	1967	1975	1972	1987
MIN	89.7	21.4	15.9	5.02	7.52	9.64	33.7	72.6	71.1	52.5	69.2	70.9
(WY)	1969	1986	1972	1974	1972	1974	2001	1984	1971	1971	1968	1984

SUMMARY STATISTICS

FOR 2001 WATER YEAR

WATER YEARS 1965 - 2001#

ANNUAL MEAN	104
HIGHEST ANNUAL MEAN	131
LOWEST ANNUAL MEAN	80.8
HIGHEST DAILY MEAN	1350
LOWEST DAILY MEAN	3.4
ANNUAL SEVEN-DAY MINIMUM	3.5
MAXIMUM PEAK FLOW	3800
MAXIMUM PEAK STAGE	17.36
INSTANTANEOUS LOW FLOW	3.2
ANNUAL RUNOFF (AC-FT)	75660
ANNUAL RUNOFF (CFSM)	7.41
ANNUAL RUNOFF (INCHES)	100.64
10 PERCENT EXCEEDS	224
50 PERCENT EXCEEDS	77
90 PERCENT EXCEEDS	15

See Period of Record, partial years used in monthly statistics
e Estimated

15053200 DUCK CREEK BELOW NANCY STREET NEAR AUKE BAY

LOCATION.--Lat 58°22'31", long 134°34'38", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 30, T. 40 S., R. 66 E. (Juneau B-2 NW), Hydrologic Unit 19010301, City and Borough of Juneau, on right bank, 50 ft south of intersection of Nancy Street and Mendenhall Loop Road, 0.4 mi north of intersection of Egan Drive and Mendenhall Loop Road, and 1.44 mi upstream from mouth.

DRAINAGE AREA.-- 1.30 mi².

PERIOD OF RECORD.--December 1993 to current year.

GAGE.--Water-stage recorder. Datum of gage is 21.87 ft above sea level, determined by levels survey.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.8	4.9	5.0	2.7	6.1	5.4	1.6	2.1	2.7	.92	2.7	3.1
2	8.1	4.6	5.2	3.0	5.0	3.6	1.5	2.5	2.6	.95	2.4	4.6
3	8.8	6.8	5.0	7.2	5.0	2.7	1.3	5.3	3.0	.89	2.2	3.9
4	8.1	4.4	5.7	5.1	4.4	2.0	2.0	6.4	2.9	.91	2.6	4.0
5	12	4.9	24	4.5	3.9	1.7	1.7	5.2	2.7	1.1	2.4	4.5
6	21	4.6	16	5.4	3.5	2.2	1.6	4.5	2.5	1.5	2.2	5.1
7	21	5.1	10	5.0	3.4	2.7	1.4	4.2	2.3	1.6	2.2	5.2
8	23	4.7	8.1	5.1	3.2	2.7	1.5	5.1	2.2	2.4	2.1	4.9
9	19	4.3	7.1	4.5	2.9	3.6	1.7	8.0	2.1	2.3	1.9	4.2
10	18	4.0	6.5	3.9	2.6	7.0	1.5	6.1	2.0	2.0	1.9	3.6
11	23	7.1	5.2	3.5	2.2	9.2	1.3	5.1	1.9	1.8	1.9	3.2
12	22	8.9	4.8	3.2	e2.1	7.0	1.3	4.6	1.8	1.6	1.8	3.1
13	24	6.4	4.0	3.4	e2.1	5.4	1.2	4.4	1.7	2.0	1.8	5.6
14	18	5.3	2.9	3.9	e2.1	4.6	1.1	3.7	1.7	2.0	1.8	6.4
15	14	5.3	2.5	6.7	e2.0	4.1	.96	3.4	1.7	1.9	1.8	5.3
16	8.8	4.8	2.4	6.1	e2.0	5.1	.92	3.2	1.6	3.6	1.7	6.5
17	7.4	9.2	2.3	6.0	e2.0	4.7	.98	3.1	1.5	2.8	1.7	5.9
18	6.3	6.9	3.9	5.3	e1.9	4.0	1.1	3.1	1.4	1.9	1.8	5.4
19	6.3	6.2	3.0	4.5	e1.9	3.4	1.0	3.0	1.4	1.7	2.6	5.1
20	6.0	5.6	2.5	4.1	1.9	2.9	1.1	2.9	1.3	1.5	2.4	7.2
21	6.9	6.3	2.2	3.8	1.9	2.4	1.2	3.2	1.2	1.8	2.1	6.1
22	7.9	9.1	2.0	3.7	1.8	2.0	1.2	3.8	1.4	6.4	2.0	5.8
23	7.9	11	2.1	4.9	1.8	1.8	1.2	4.5	1.3	9.8	1.9	5.8
24	7.1	9.9	2.1	4.9	1.7	e1.7	1.3	4.4	1.2	5.2	1.8	5.3
25	5.7	7.8	2.1	4.3	1.7	e1.7	1.5	3.6	1.2	5.1	1.8	5.0
26	4.9	6.8	2.1	3.9	3.6	e1.6	1.6	3.3	1.1	4.5	1.8	4.5
27	4.3	6.2	2.1	5.9	16	e1.5	1.9	3.1	1.0	3.9	4.3	4.1
28	3.7	5.7	2.1	6.8	8.4	1.9	2.4	2.9	.97	3.5	3.2	3.9
29	3.1	5.2	2.0	5.2	---	1.9	2.2	2.8	.96	3.3	3.2	3.7
30	4.2	4.8	3.1	4.5	---	1.7	2.2	2.9	.95	3.1	3.2	6.4
31	4.9	---	3.2	5.3	---	1.7	---	2.9	---	2.9	3.3	---
TOTAL	344.2	186.8	151.2	146.3	97.1	103.9	43.46	123.3	52.28	84.87	70.5	147.4
MEAN	11.1	6.23	4.88	4.72	3.47	3.35	1.45	3.98	1.74	2.74	2.27	4.91
MAX	24	11	24	7.2	16	9.2	2.4	8.0	3.0	9.8	4.3	7.2
MIN	3.1	4.0	2.0	2.7	1.7	1.5	.92	2.1	.95	.89	1.7	3.1
AC-FT	683	371	300	290	193	206	86	245	104	168	140	292
CFSM	8.54	4.79	3.75	3.63	2.67	2.58	1.11	3.06	1.34	2.11	1.75	3.78
IN.	9.85	5.35	4.33	4.19	2.78	2.97	1.24	3.53	1.50	2.43	2.02	4.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2001, BY WATER YEAR (WY)#

	MEAN	4.91	5.51	2.66	2.18	2.42	3.09	3.04	2.24	2.84	3.72	7.95
MAX	18.1	10.3	12.2	4.85	3.55	5.08	6.16	4.97	3.47	4.23	6.13	14.5
(WY)	2000	2000	2000	2000	1997	1994	1999	1999	1999	1997	2000	2000
MIN	5.29	2.36	1.95	.85	.79	.94	1.45	1.60	1.20	1.75	1.31	3.81
(WY)	1998	1996	1996	1997	1999	1995	2001	1996	1998	1995	1994	1997

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1994 - 2001#
ANNUAL TOTAL	1958.79	1551.31	
ANNUAL MEAN	5.35	4.25	4.18
HIGHEST ANNUAL MEAN			6.90
LOWEST ANNUAL MEAN			3.26
HIGHEST DAILY MEAN	30 Sep 16	24 Oct 13	68 Dec 28 1999
LOWEST DAILY MEAN	.19 Mar 15	.89 Jul 3	.19 Mar 15 2000
ANNUAL SEVEN-DAY MINIMUM	.26 Mar 10	.94 Jun 28	.26 Mar 10 2000
MAXIMUM PEAK FLOW		34 Dec 5	80 Dec 28 1999
MAXIMUM PEAK STAGE		5.96 Dec 5	6.80 Dec 28 1999
MAXIMUM PEAK STAGE			a7.59 Sep 25 1996
INSTANTANEOUS LOW FLOW		b.80 Jul 3	c.18 Mar 8 1999
ANNUAL RUNOFF (AC-FT)	3890	3080	3030
ANNUAL RUNOFF (CFSM)	4.12	3.27	3.21
ANNUAL RUNOFF (INCHES)	56.05	44.39	43.67
10 PERCENT EXCEEDS	12	7.1	8.4
50 PERCENT EXCEEDS	3.7	3.2	2.7
90 PERCENT EXCEEDS	1.2	1.5	1.1

See period of Record; partial years used in monthly summary statistics
a Backwater caused by culvert, which was removed Apr. 1998
b Jul. 3 and 4
c Mar. 8, 1999 and Mar. 14 and 15, 2000
e Estimated

15055500 ANTLER RIVER BELOW ANTLER LAKE NEAR AUKE BAY

LOCATION.--Lat 58°51'07", long 134°42'31", in NE¹/₄ SE¹/₄ NE¹/₄ sec. 10, T. 35 S., R. 64 E. (Juneau D-3 quad), Hydrologic Unit 19010301, in Tongass National Forest, 200 ft below outlet of Antler Lake, 10 mi northeast of Berners Bay, and located 32 mi northwest of Auke Bay.

DRAINAGE AREA.--26.0 mi², approximately.

PERIOD OF RECORD.--May 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 80 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records fair,

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	168	72	65	28	72	46	18	53	222	368	233	219
2	137	69	66	29	72	42	18	52	258	365	240	229
3	117	84	61	61	69	37	17	60	279	352	255	217
4	100	86	57	75	63	33	18	71	270	352	255	195
5	108	80	76	68	56	30	18	71	258	324	255	199
6	283	73	97	65	50	29	18	66	245	309	239	217
7	406	69	90	66	46	32	17	61	256	309	219	221
8	416	64	79	81	41	31	17	60	269	322	207	251
9	341	59	69	79	37	30	17	63	291	306	202	226
10	270	54	61	70	33	30	17	62	333	297	197	191
11	255	54	55	61	30	34	17	59	333	278	192	163
12	304	64	49	54	28	41	17	60	349	256	191	152
13	476	65	44	49	29	40	16	68	354	241	206	377
14	380	61	39	45	28	38	16	75	338	238	228	704
15	380	58	36	45	26	36	16	80	305	246	237	569
16	305	55	33	44	25	35	16	87	291	267	226	409
17	233	58	31	44	23	33	16	92	320	273	212	343
18	183	56	32	49	21	31	18	91	337	280	201	322
19	154	52	32	49	20	29	19	90	360	305	216	261
20	133	51	30	47	19	26	21	88	382	359	227	213
21	121	83	28	44	18	25	24	88	432	389	220	177
22	123	162	27	43	18	23	26	97	425	454	205	191
23	147	172	25	47	17	22	29	118	386	501	185	184
24	144	151	24	46	17	20	33	120	372	410	166	171
25	126	128	23	43	16	19	36	111	343	366	154	179
26	109	111	23	39	17	19	37	105	323	334	169	162
27	94	96	22	45	39	19	45	111	336	305	281	144
28	83	83	21	53	50	18	55	128	388	284	321	127
29	73	72	21	50	---	18	56	154	413	270	287	113
30	67	64	22	46	---	18	55	168	379	252	260	116
31	70	---	27	50	---	19	---	183	---	240	244	---
TOTAL	6306	2406	1365	1615	980	903	743	2792	9847	9852	6930	7242
MEAN	203	80.2	44.0	52.1	35.0	29.1	24.8	90.1	328	318	224	241
MAX	476	172	97	81	72	46	56	183	432	501	321	704
MIN	67	51	21	28	16	18	16	52	222	238	154	113
AC-FT	12510	4770	2710	3200	1940	1790	1470	5540	19530	19540	13750	14360
CFSM	7.82	3.08	1.69	2.00	1.35	1.12	.95	3.46	12.6	12.2	8.60	9.28
IN.	9.02	3.44	1.95	2.31	1.40	1.29	1.06	3.99	14.09	14.10	9.92	10.36

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2001, BY WATER YEAR (WY)#

MEAN	180	65.9	76.1	37.2	24.0	21.6	43.0	136	318	281	216	237
MAX	240	80.2	134	52.1	35.0	29.1	55.8	204	330	327	231	271
(WY)	1999	2001	2000	2001	2001	2001	1999	1998	1999	2000	2000	1999
MIN	104	50.8	33.9	21.2	11.5	14.6	24.8	90.1	290	215	189	207
(WY)	1998	1999	1999	1999	1999	1999	2001	2001	1998	1998	1998	1998

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1997 - 2001#

ANNUAL TOTAL	52173	50981	
ANNUAL MEAN	143	140	137
HIGHEST ANNUAL MEAN			147
LOWEST ANNUAL MEAN			124
HIGHEST DAILY MEAN	543	704	993
LOWEST DAILY MEAN	17	a16	7.8
ANNUAL SEVEN-DAY MINIMUM	18	16	8.0
MAXIMUM PEAK FLOW		768	b1300
MAXIMUM PEAK STAGE		32.95	34.07
INSTANTANEOUS LOW FLOW		15	7.8
ANNUAL RUNOFF (AC-FT)	103500	101100	99160
ANNUAL RUNOFF (CFSM)	5.48	5.37	5.26
ANNUAL RUNOFF (INCHES)	74.65	72.94	71.53
10 PERCENT EXCEEDS	325	335	324
50 PERCENT EXCEEDS	96	79	111
90 PERCENT EXCEEDS	22	21	21

See period of Record; partial years used in monthly summary statistics

a Feb. 25 and Apr. 13-17

b From rating curve extended above 600 ft³/s on basis of slope-area measurement at gage height, 34.07 ft

15056030 KAKUHAN CREEK NEAR HAINES

LOCATION.--Lat 59°00'19", long 135°11'02", in SW¹/₄ NE¹/₄ SE¹/₄ sec. 14, T. 33 S., R. 61 E. (Skagway A-1 quad), Hydrologic Unit 19010301, in Tongass National Forest, about 200 ft upstream from mouth on west side of Lynn Canal, 19 mi southeast of Haines, and 60 mi northwest of Juneau.

DRAINAGE AREA.--1.53 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 25 ft above sea level, from topographic map.

REMARKS.--Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	3.0	2.0	1.6	2.3	1.2	.64	2.8	13	38	20	30
2	5.9	3.1	1.8	1.8	1.4	.98	.62	2.9	15	36	24	29
3	5.8	4.4	1.7	4.8	1.1	.89	.64	2.9	13	35	23	17
4	5.4	3.0	2.0	2.3	1.0	.87	.74	2.7	11	47	21	14
5	25	2.7	4.0	1.6	.78	.88	.84	2.3	9.6	37	19	14
6	47	2.6	3.3	1.5	e.65	1.0	.88	2.1	9.5	48	17	11
7	50	2.6	2.4	2.0	e.60	1.6	.99	2.2	10	49	16	13
8	20	2.6	1.8	2.2	e.60	1.3	1.1	2.1	12	39	16	10
9	13	2.4	1.5	1.6	e.55	1.2	1.1	2.1	17	39	17	9.5
10	10	2.2	1.5	1.1	e.55	1.3	1.2	2.0	17	29	16	9.0
11	11	2.4	1.5	.94	e.50	1.5	1.3	2.2	16	24	16	8.1
12	80	3.1	1.4	e.90	e.50	1.4	1.3	2.6	18	22	18	19
13	26	2.6	e1.2	e.85	e.48	1.2	.98	3.5	19	27	22	67
14	14	2.3	e1.1	1.1	e.48	1.2	.93	4.0	14	33	25	39
15	15	2.0	e1.1	1.6	e.46	1.1	.95	5.6	13	40	22	23
16	9.4	2.0	e1.0	1.5	e.46	1.0	1.2	5.6	16	45	20	27
17	7.9	2.5	e.95	2.2	e.44	.93	1.8	5.3	24	44	20	37
18	6.9	2.0	e1.0	2.8	e.44	e.80	2.1	5.5	26	54	20	31
19	6.3	1.9	e1.1	1.9	e.42	e.70	2.8	5.6	29	57	21	21
20	5.9	3.0	1.1	1.4	e.44	e.65	3.5	5.8	40	42	20	17
21	5.3	6.3	1.1	1.2	e.44	e.60	4.1	5.8	41	37	19	17
22	6.2	8.7	1.0	1.4	e.42	e.55	3.7	6.4	29	62	18	17
23	6.0	4.7	1.1	1.6	e.40	e.55	3.0	5.8	26	45	16	12
24	5.0	3.8	1.0	1.2	e.36	e.50	2.9	5.0	31	32	15	16
25	4.4	3.2	1.1	1.0	e.40	e.60	2.9	4.8	25	30	15	15
26	4.0	2.9	1.1	1.1	.87	e.65	2.9	5.7	27	24	23	11
27	3.4	2.7	1.1	1.8	2.4	e.70	3.7	8.4	32	21	51	9.1
28	3.0	2.3	1.0	1.6	1.5	e.70	3.5	9.4	42	22	27	8.2
29	2.9	2.0	1.2	1.0	---	.73	2.8	10	41	24	38	7.4
30	3.1	1.9	3.1	.88	---	.68	2.6	8.8	32	20	42	7.7
31	3.3	---	2.5	2.1	---	.68	---	11	---	18	40	---
TOTAL	418.0	90.9	48.75	50.57	20.94	28.64	57.71	150.9	668.1	1120	697	566.0
MEAN	13.5	3.03	1.57	1.63	.75	.92	1.92	4.87	22.3	36.1	22.5	18.9
MAX	80	8.7	4.0	4.8	2.4	1.6	4.1	11	42	62	51	67
MIN	2.9	1.9	.95	.85	.36	.50	.62	2.0	9.5	18	15	7.4
AC-FT	829	180	97	100	42	57	114	299	1330	2220	1380	1120
CFSM	8.81	1.98	1.03	1.07	.49	.60	1.26	3.18	14.6	23.6	14.7	12.3
IN.	10.16	2.21	1.19	1.23	.51	.70	1.40	3.67	16.24	27.23	16.95	13.76

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2001, BY WATER YEAR (WY)#

	1997	1998	1999	2000	2001
MEAN	10.1	3.32	3.32	1.36	1.06
MAX	14.9	4.16	5.70	1.63	1.28
(WY)	1999	1999	2000	2001	1998
MIN	4.70	2.81	1.57	1.12	.75
(WY)	1998	2000	2001	1998	2001

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1997 - 2001#

ANNUAL TOTAL	3622.89	3917.51	
ANNUAL MEAN	9.90	10.7	10.9
HIGHEST ANNUAL MEAN			13.3
LOWEST ANNUAL MEAN			9.66
HIGHEST DAILY MEAN	80	80	152
LOWEST DAILY MEAN	.55	.36	.36
ANNUAL SEVEN-DAY MINIMUM	.59	.41	.41
MAXIMUM PEAK FLOW		a342	a415
MAXIMUM PEAK STAGE		8.65	8.77
ANNUAL RUNOFF (AC-FT)	7190	7770	7860
ANNUAL RUNOFF (CFSM)	6.47	7.01	7.09
ANNUAL RUNOFF (INCHES)	88.09	95.25	96.38
10 PERCENT EXCEEDS	28	31	32
50 PERCENT EXCEEDS	3.7	3.2	5.2
90 PERCENT EXCEEDS	.81	.74	.98

See Period of Record; partial years used in monthly statistics

a From rating curve extended above 51 ft³/s

e Estimated

15056030 KAKUHAN CREEK NEAR HAINES--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1998 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: August 1998 to current year.

INSTRUMENTATION.-- Electronic water-temperature recorder set for 15-minute recording interval.

REMARKS.-- Records represent water temperature at the sensor within 0.5°C.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum, 15.0°C, August 1-2, 1999; minimum, 0.0°C, on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 14.5°C, August 14 and 15; minimum, 0.0°C, on many days during winter.

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	2.0	1.0	1.5	4.0	2.0	3.5	1.5	.0	.5	1.5	1.0	1.5
2	2.0	1.0	1.5	2.5	1.5	2.0	1.5	.5	1.0	2.0	1.5	1.5
3	3.0	1.5	2.0	5.0	2.5	4.0	2.0	1.5	1.5	2.5	1.5	2.5
4	3.0	1.0	2.0	2.5	1.0	1.5	2.0	.5	1.5	2.5	2.0	2.0
5	6.5	2.5	4.0	1.5	.5	1.0	3.0	.5	2.0	2.0	1.5	1.5
6	7.5	5.5	6.5	1.5	.5	1.0	3.0	2.0	2.5	2.5	2.0	2.0
7	7.0	5.5	6.5	2.0	.5	1.5	2.5	1.5	2.0	3.5	2.5	3.0
8	6.5	4.5	5.5	3.0	1.5	2.0	1.5	.5	1.0	3.5	2.5	2.5
9	7.0	5.0	6.0	1.5	1.0	1.0	.5	.0	.0	2.5	.5	1.5
10	6.0	5.0	5.5	2.0	.5	1.0	.0	.0	.0	.5	.0	.0
11	7.5	5.0	6.5	3.5	2.0	3.0	.5	.0	.0	.0	.0	.0
12	7.5	6.0	6.5	4.0	3.0	3.5	.5	.0	.0	.0	.0	.0
13	7.0	5.0	6.0	3.5	3.0	3.5	.0	.0	.0	.5	.0	.0
14	6.0	5.0	5.0	3.5	3.0	3.5	.0	.0	.0	1.0	.5	.5
15	7.0	5.5	6.0	3.5	3.0	3.5	.0	.0	.0	1.5	1.0	1.0
16	6.0	5.0	5.5	3.0	2.5	2.5	.0	.0	.0	1.5	1.5	1.5
17	7.0	4.5	5.5	3.5	2.5	3.0	.0	.0	.0	2.5	1.5	2.0
18	5.5	4.5	4.5	3.5	2.5	3.0	.0	.0	.0	2.5	2.0	2.5
19	6.0	4.5	5.0	3.5	2.0	2.5	.0	.0	.0	2.5	2.0	2.5
20	4.5	3.5	4.0	4.5	3.5	4.0	.5	.0	.0	2.0	1.0	1.5
21	4.5	2.5	4.0	5.0	4.5	5.0	.5	.0	.0	2.0	1.0	1.5
22	6.0	3.0	5.0	5.0	3.5	4.5	.0	.0	.0	2.0	1.5	2.0
23	6.0	5.0	5.5	4.0	3.0	3.5	.5	.0	.0	2.5	1.0	2.0
24	5.0	4.5	4.5	3.5	3.0	3.5	.5	.0	.5	1.5	.5	1.0
25	4.5	3.5	4.0	3.0	2.0	2.5	.5	.5	.5	1.5	.5	1.0
26	3.5	3.0	3.5	3.5	3.0	3.0	1.0	.5	.5	2.5	1.5	2.0
27	3.0	2.0	2.5	3.5	3.0	3.0	1.0	.5	1.0	2.5	1.5	2.0
28	2.0	.5	1.5	3.0	1.0	2.5	1.0	.5	1.0	2.0	1.5	2.0
29	.5	.5	.5	1.0	.5	.5	1.0	.5	1.0	1.5	1.0	1.5
30	2.0	.5	1.0	.5	.5	.5	1.5	.5	1.0	1.0	.5	1.0
31	3.5	2.0	3.0	---	---	---	2.0	1.5	1.5	2.0	.0	1.0
MONTH	7.5	.5	4.2	5.0	.5	2.6	3.0	.0	.6	3.5	.0	1.5

15056030 KAKUHAN CREEK NEAR HAINES--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	2.5	2.0	2.5	1.0	.5	.5	.5	.0	.0	5.0	3.0	4.0
2	2.0	1.5	1.5	1.0	.5	.5	.5	.0	.0	3.5	2.5	3.5
3	2.0	1.0	2.0	1.0	.5	.5	.5	.0	.5	4.0	2.0	3.0
4	1.0	.5	1.0	1.0	.0	.5	1.0	.5	.5	4.5	3.0	3.5
5	.5	.0	.0	1.0	.5	.5	1.0	.5	1.0	3.5	2.0	3.0
6	.0	.0	.0	1.0	.5	.5	1.0	.5	.5	4.0	2.5	3.0
7	.0	.0	.0	1.5	.5	1.0	1.0	.5	1.0	4.0	3.5	3.5
8	.0	.0	.0	2.0	1.0	1.5	1.5	1.0	1.0	4.0	3.0	3.5
9	.0	.0	.0	2.0	1.5	2.0	1.5	.5	1.0	4.0	3.5	3.5
10	.0	.0	.0	2.5	1.5	2.0	1.5	.5	1.0	4.5	2.5	3.5
11	.0	.0	.0	3.0	2.0	2.5	1.5	1.0	1.5	5.0	3.5	4.5
12	.0	.0	.0	2.5	2.0	2.0	2.5	1.5	2.0	6.0	3.5	4.5
13	.0	.0	.0	3.0	1.5	2.0	2.5	1.5	2.0	5.5	4.5	5.0
14	.0	.0	.0	2.5	2.0	2.5	3.0	1.5	2.0	6.5	3.5	5.0
15	.0	.0	.0	2.0	2.0	2.0	3.0	1.5	2.0	5.5	4.5	5.0
16	.0	.0	.0	2.0	1.5	2.0	3.5	1.5	2.5	5.5	4.0	4.5
17	.0	.0	.0	2.0	1.5	1.5	3.5	2.5	3.0	6.0	4.0	4.5
18	.0	.0	.0	1.5	.0	.5	4.0	2.5	3.0	6.0	3.5	4.5
19	.0	.0	.0	.5	.0	.0	4.5	2.5	3.5	6.5	3.5	4.5
20	.0	.0	.0	.0	.0	.0	4.5	2.5	3.5	5.0	4.0	4.5
21	.5	.0	.0	.0	.0	.0	5.0	2.5	3.5	6.5	4.0	5.0
22	.5	.0	.0	.0	.0	.0	4.5	3.0	3.5	6.0	4.0	5.0
23	.0	.0	.0	.0	.0	.0	4.0	3.0	3.5	5.0	4.0	4.5
24	.0	.0	.0	.0	.0	.0	4.0	2.5	3.5	5.5	3.5	4.5
25	.0	.0	.0	.0	.0	.0	5.0	3.0	4.0	5.5	3.5	4.5
26	.0	.0	.0	.0	.0	.0	4.5	3.5	4.0	7.5	3.0	5.0
27	.5	.0	.0	.0	.0	.0	5.0	3.0	4.0	6.5	5.0	5.5
28	1.0	.5	.5	.0	.0	.0	4.0	2.5	3.5	7.5	5.0	6.0
29	---	---	---	.5	.0	.0	4.0	2.5	3.5	6.0	5.0	5.5
30	---	---	---	.5	.0	.0	5.0	3.0	4.0	6.5	4.0	5.0
31	---	---	---	.5	.0	.5	---	---	---	7.0	5.0	5.5
MONTH	2.5	.0	.3	3.0	.0	.8	5.0	.0	2.3	7.5	2.0	4.4

	JUNE			JULY			AUGUST			SEPTEMBER		
1	8.0	4.0	5.5	10.5	6.5	8.0	13.0	8.0	10.0	9.0	6.5	7.5
2	6.0	5.0	5.0	9.5	6.5	8.0	13.5	9.5	11.0	8.5	6.5	7.5
3	5.5	4.5	5.0	11.0	6.0	8.5	12.0	9.0	10.5	9.0	6.5	7.5
4	7.0	4.5	5.5	8.0	6.5	7.5	10.5	9.0	9.5	8.5	7.0	7.5
5	6.5	4.5	5.5	7.5	6.5	6.5	11.0	8.5	9.5	8.0	7.0	7.5
6	8.0	5.0	6.0	7.0	5.5	6.5	12.0	7.5	9.5	8.5	6.5	7.5
7	7.0	5.0	6.0	6.5	6.0	6.5	11.0	9.0	10.0	9.0	6.0	7.5
8	9.0	4.5	6.0	7.5	5.5	6.5	10.5	9.0	9.5	9.0	6.5	7.5
9	8.5	5.0	6.5	7.5	5.5	6.5	12.0	8.5	9.5	9.0	6.0	7.0
10	6.0	5.0	5.5	8.5	6.0	7.0	10.0	8.0	9.0	10.0	6.5	7.5
11	7.5	5.0	6.0	8.5	6.5	7.5	12.5	8.5	10.0	8.0	6.5	7.5
12	7.0	5.0	5.5	8.0	6.5	7.5	14.0	8.5	10.5	8.0	7.0	7.5
13	6.5	5.0	5.5	8.0	6.5	7.5	14.5	9.5	11.5	9.0	7.5	8.5
14	7.0	4.5	6.0	10.0	7.0	8.0	14.5	9.5	11.5	9.0	7.5	8.5
15	8.0	5.5	6.5	12.0	6.5	9.0	14.5	8.5	11.0	9.0	7.0	8.0
16	9.5	5.5	7.0	9.0	7.5	8.0	14.0	8.0	10.5	10.0	8.0	9.0
17	7.5	6.0	6.5	9.5	7.5	8.5	11.5	9.5	10.5	9.5	7.5	9.0
18	9.0	6.0	7.0	11.5	7.5	9.0	10.5	9.0	10.0	8.5	7.0	7.5
19	8.0	5.5	6.5	13.5	7.5	10.0	10.0	9.0	9.5	7.5	6.5	7.0
20	8.5	6.0	7.0	13.5	8.0	10.0	10.0	8.0	9.0	7.5	6.0	6.5
21	8.5	5.5	7.0	13.5	8.0	10.5	11.0	8.0	9.5	8.0	5.5	6.5
22	7.5	6.0	6.5	10.5	7.5	9.5	10.0	8.0	9.0	7.5	6.5	7.0
23	10.0	6.0	7.5	9.0	7.0	8.0	10.0	7.5	8.5	7.5	5.5	6.5
24	8.5	5.0	6.5	9.0	7.0	8.0	9.0	8.0	8.5	6.5	6.0	6.0
25	10.0	5.0	7.0	9.0	7.5	8.5	9.0	6.5	8.0	7.0	6.0	6.5
26	10.5	5.5	7.5	10.0	8.0	8.5	9.5	8.0	8.5	8.0	6.0	6.5
27	10.5	6.5	8.0	10.0	7.5	8.5	9.0	7.5	8.0	7.0	6.5	6.5
28	8.0	6.5	7.5	9.0	7.5	8.5	9.0	7.5	8.0	7.0	5.5	6.5
29	8.5	6.5	7.0	12.0	7.5	9.0	9.0	7.5	8.0	7.5	5.0	6.0
30	10.0	6.0	7.5	10.0	8.0	9.0	10.5	8.0	8.5	7.5	6.0	6.5
31	---	---	---	9.0	8.0	8.5	8.5	7.0	7.5	---	---	---
MONTH	10.5	4.0	6.4	13.5	5.5	8.2	14.5	6.5	9.5	10.0	5.0	7.3

15057580 KAHTAHEENA RIVER ABOVE UPPER FALLS NEAR GUSTAVUS

LOCATION.--Lat 58°26'37", long 135°36'01", in SW¹/₄ SE¹/₄ SE¹/₄ sec. 36, T. 39 S., R. 59 E. (Juneau B-5 quad), Hydrologic Unit 19010302, in Glacier Bay National Park and Preserve, 1.7 miles above the mouth at Icy Passage, 4.5 mi east of Gustavus, and 44 mi west of Juneau.

DRAINAGE AREA.--10.1 mi²

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1999 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 560 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges and those above 130 ft³/s, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	34	47	29	56	21	9.8	40	144	45	57	85
2	30	28	38	58	35	14	9.7	40	157	42	44	92
3	28	111	29	218	39	12	9.5	52	206	39	36	64
4	26	59	37	77	24	13	9.8	52	151	39	32	54
5	72	43	274	57	19	11	e11	38	129	46	28	75
6	79	37	114	80	21	12	e12	28	133	75	25	64
7	134	47	66	54	16	25	e11	27	132	104	22	105
8	120	33	43	43	e14	24	e11	26	122	101	21	83
9	100	27	30	32	e13	22	e11	45	121	79	19	60
10	99	24	25	25	e12	52	15	33	128	64	17	44
11	148	41	22	22	e11	87	15	39	116	52	16	35
12	222	41	20	19	e23	38	27	47	94	45	15	47
13	222	30	e19	18	e34	30	19	54	93	57	14	283
14	159	27	e17	18	e22	34	18	56	96	52	13	218
15	120	30	e14	21	e18	25	17	57	94	48	13	107
16	81	27	e13	21	e14	22	17	58	84	44	12	126
17	62	41	e11	61	e13	18	20	62	87	38	12	152
18	48	27	e12	35	e11	16	34	63	85	33	12	120
19	42	26	e12	30	e10	e15	30	60	83	30	12	84
20	37	28	e11	22	e9.5	e13	27	57	107	29	12	94
21	42	98	e10	21	e9.5	e12	29	59	115	27	12	72
22	64	208	e10	29	e12	e11	30	69	84	31	11	76
23	90	132	e12	35	e14	e10	33	85	69	41	11	72
24	70	81	e11	23	e13	e10	34	73	70	91	11	52
25	59	55	e17	19	e12	e10	36	62	65	107	11	43
26	45	41	e33	19	e17	e12	33	57	59	165	12	35
27	37	35	e14	32	e113	10	48	67	70	93	62	33
28	31	31	15	27	50	10	61	82	81	66	27	28
29	26	26	19	19	---	10	45	92	65	65	56	26
30	27	23	e90	16	---	10	42	89	50	84	97	105
31	36	---	53	71	---	10	---	125	---	73	85	---
TOTAL	2389	1491	1138	1251	655.0	619	724.8	1794	3090	1905	827	2534
MEAN	77.1	49.7	36.7	40.4	23.4	20.0	24.2	57.9	103	61.5	26.7	84.5
MAX	222	208	274	218	113	87	61	125	206	165	97	283
MIN	26	23	10	16	9.5	10	9.5	26	50	27	11	26
MED	62	34	19	29	15	13	20	57	94	52	16	74
AC-FT	4740	2960	2260	2480	1300	1230	1440	3560	6130	3780	1640	5030
CFSM	7.63	4.92	3.63	4.00	2.32	1.98	2.39	5.73	10.2	6.08	2.64	8.36
IN.	8.80	5.49	4.19	4.61	2.41	2.28	2.67	6.61	11.38	7.02	3.05	9.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)#

	MEAN	98.9	52.3	82.2	29.5	17.1	21.4	31.0	74.2	108	70.3	44.1	105
MAX	121	54.9	128	40.4	23.4	22.7	37.8	90.6	114	79.1	61.6	128	
(WY)	2000	2000	2000	2001	2001	2000	2000	2000	2000	2000	2000	1999	
MIN	77.1	49.7	36.7	18.7	11.0	20.0	24.2	57.9	103	61.5	26.7	84.5	
(WY)	2001	2001	2001	2000	2000	2001	2001	2001	2001	2001	2001	2001	

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1999 - 2001#
ANNUAL TOTAL	21396.4	18417.8	
ANNUAL MEAN	58.5	50.5	60.4
HIGHEST ANNUAL MEAN			70.3
LOWEST ANNUAL MEAN			50.5
HIGHEST DAILY MEAN	296	283	1110
LOWEST DAILY MEAN	5.0	a9.5	5.0
ANNUAL SEVEN-DAY MINIMUM	6.9	9.8	6.9
MAXIMUM PEAK FLOW		509	b1650
MAXIMUM PEAK STAGE		29.31	30.52
INSTANTANEOUS LOW FLOW		9.5	5.0
ANNUAL RUNOFF (AC-FT)	42440	36530	43750
ANNUAL RUNOFF (CFSM)	5.79	5.00	5.98
ANNUAL RUNOFF (INCHES)	78.81	67.84	81.24
10 PERCENT EXCEEDS	126	106	128
50 PERCENT EXCEEDS	41	36	42
90 PERCENT EXCEEDS	11	12	12

See Period of Record, partial years used in monthly statistics

e Estimated

a Feb. 20-21

b From rating curve extended above 130 ft³/s

15057580 KAHTAHEENA RIVER ABOVE UPPER FALLS NEAR GUSTAVUS--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1999 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1999 to current year.

INSTRUMENTATION.-- Electronic water-temperature recorder set for 1-hour recording interval.

REMARKS.--Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross sections on January 25 and March 22. Temperature cross sections found no variation. No variation was found between mean stream temperature and sensor temperature.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 13.5°C, August 13-15, 2001; minimum, 0.0°C, on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 13.5°C, August 13-15; minimum, 0.0°C, on many days during the winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	STREAM WIDTH (FT) (00004)	TEMPER- ATURE WATER (DEG C) (00010)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	SAM- PLING METHOD, CODES (82398)
JAN						
25...	1402	39.0	2.0	19	27.62	10
25...	1403	39.0	2.0	19	27.62	10
25...	1404	39.0	2.0	19	27.62	10
25...	1405	39.0	2.0	19	27.62	10
MAR						
22...	1135	37.0	.00	11	--	10
22...	1136	37.0	.00	11	--	10
22...	1137	37.0	.00	11	--	10
22...	1138	37.0	.00	11	--	10
22...	1139	37.0	.00	11	--	10

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	4.0	3.0	3.5	3.5	2.5	3.0	2.5	1.0	2.0	2.0	1.0	1.5
2	4.0	3.0	3.0	3.5	2.5	3.0	2.5	2.0	2.5	2.0	.5	1.5
3	3.5	2.5	3.0	4.0	3.5	4.0	2.5	2.0	2.5	1.5	.5	1.5
4	3.5	2.0	3.0	3.5	2.0	2.5	2.5	2.0	2.5	2.0	1.5	2.0
5	6.0	3.5	4.5	3.0	2.0	2.5	3.0	2.0	2.5	2.0	1.0	1.5
6	6.5	6.0	6.5	3.0	3.0	3.0	3.0	3.0	3.0	1.5	1.5	1.5
7	7.0	6.0	6.5	3.5	3.0	3.5	3.0	2.0	2.5	2.5	1.5	2.0
8	6.0	5.0	5.5	3.5	2.5	3.0	2.0	.5	1.5	2.5	2.0	2.0
9	6.0	5.5	5.5	2.5	1.5	2.0	.5	.0	.5	2.0	.5	1.5
10	6.0	5.0	5.5	2.5	1.5	2.0	1.0	.5	1.0	.5	.0	.5
11	6.5	5.0	6.0	3.5	2.5	3.0	1.5	.5	1.0	1.0	.0	.5
12	7.5	6.0	6.5	4.0	3.0	3.5	.5	.0	.0	.5	.0	.0
13	6.5	5.5	6.0	3.5	2.5	3.0	.0	.0	.0	1.0	.0	.5
14	6.0	5.0	5.5	3.5	3.0	3.5	.0	.0	.0	1.5	1.0	1.5
15	5.5	5.5	5.5	3.5	2.5	3.5	.0	.0	.0	1.5	1.5	1.5
16	5.5	5.0	5.5	3.0	2.5	2.5	.0	.0	.0	1.5	1.0	1.5
17	5.5	4.5	5.0	3.5	3.0	3.0	.0	.0	.0	2.0	1.5	1.5
18	5.0	4.0	4.5	3.0	3.0	3.0	.0	.0	.0	2.0	1.5	1.5
19	5.0	4.5	5.0	3.5	3.0	3.0	.0	.0	.0	2.0	1.5	2.0
20	5.0	4.5	4.5	4.5	3.0	3.5	.0	.0	.0	2.0	1.0	1.5
21	5.0	4.5	4.5	4.5	4.0	4.5	.0	.0	.0	2.0	1.5	2.0
22	5.5	4.5	5.0	4.5	3.5	4.0	.0	.0	.0	2.0	2.0	2.0
23	5.5	5.0	5.0	3.5	3.0	3.5	.0	.0	.0	2.0	1.0	1.5
24	5.0	4.5	5.0	3.5	3.0	3.5	.0	.0	.0	1.5	1.0	1.5
25	4.5	4.0	4.5	3.0	3.0	3.0	.0	.0	.0	2.0	1.5	1.5
26	4.5	3.5	4.0	3.0	3.0	3.0	.0	.0	.0	2.0	1.5	2.0
27	3.5	3.0	3.5	3.0	3.0	3.0	.0	.0	.0	2.0	1.5	2.0
28	3.5	2.5	3.0	3.0	1.5	2.5	1.0	.0	.5	1.5	1.0	1.5
29	2.5	1.0	2.0	2.0	1.0	1.5	1.0	.0	1.0	1.5	1.0	1.0
30	3.0	2.0	2.5	2.0	1.5	2.0	1.0	.0	.5	1.5	.5	1.0
31	3.5	3.0	3.5	---	---	---	1.5	1.0	1.0	1.5	.0	1.0
MONTH	7.5	1.0	4.6	4.5	1.0	3.0	3.0	.0	.8	2.5	.0	1.4

15057580 KAHTAHEENA RIVER ABOVE UPPER FALLS NEAR GUSTAVUS--Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	2.0	1.5	1.5	.0	.0	.0	.0	.0	.0	4.0	2.5	3.5
2	2.0	1.5	2.0	.0	.0	.0	.0	.0	.0	3.5	2.0	3.0
3	2.0	1.5	1.5	.0	.0	.0	.0	.0	.0	4.0	2.5	3.0
4	1.5	.5	1.0	.0	.0	.0	.0	.0	.0	3.5	2.5	3.0
5	1.0	.0	.5	.0	.0	.0	.5	.0	.0	4.0	2.0	3.0
6	.5	.0	.0	.0	.0	.0	1.0	.0	.0	4.5	2.0	3.5
7	1.0	.0	.5	.0	.0	.0	1.0	.0	.5	5.0	3.0	4.0
8	.5	.0	.0	.0	.0	.0	.5	.0	.5	4.5	3.0	3.5
9	.0	.0	.0	1.0	.0	.5	2.0	.0	.5	4.5	3.0	3.5
10	.0	.0	.0	1.0	.0	.5	2.0	.0	.5	5.0	2.5	4.0
11	.0	.0	.0	1.0	.5	1.0	1.5	.0	.5	5.0	3.5	4.0
12	.0	.0	.0	1.5	.5	1.0	1.0	.0	.5	5.5	2.5	4.0
13	.0	.0	.0	2.0	1.0	1.5	3.0	.5	1.5	5.5	4.0	4.5
14	.0	.0	.0	2.0	1.0	1.5	3.0	1.0	1.5	5.5	3.0	4.5
15	.0	.0	.0	2.5	1.5	1.5	3.5	.0	1.5	6.0	3.5	4.5
16	.0	.0	.0	2.0	1.0	1.5	4.0	.0	1.5	5.5	3.0	4.5
17	.0	.0	.0	2.5	1.0	2.0	3.0	1.0	2.0	5.5	3.0	4.5
18	.0	.0	.0	1.5	.0	1.0	3.5	1.0	2.0	5.5	3.0	4.5
19	.0	.0	.0	.0	.0	.0	3.0	1.0	2.0	5.5	2.5	4.0
20	.0	.0	.0	.0	.0	.0	4.5	1.0	2.0	4.5	3.0	4.0
21	.0	.0	.0	.0	.0	.0	5.0	1.0	2.5	6.0	3.5	4.5
22	.0	.0	.0	.0	.0	.0	3.0	1.5	2.5	4.5	3.5	4.0
23	.0	.0	.0	.0	.0	.0	3.5	2.0	2.5	4.5	3.5	4.0
24	.0	.0	.0	.0	.0	.0	2.5	1.5	2.5	6.0	3.5	4.5
25	.0	.0	.0	.0	.0	.0	4.5	2.0	3.0	5.0	3.0	4.0
26	.0	.0	.0	.0	.0	.0	3.5	2.0	3.0	6.5	2.5	4.5
27	.0	.0	.0	.0	.0	.0	4.0	2.0	3.0	6.0	4.0	5.0
28	.0	.0	.0	.0	.0	.0	4.0	2.0	3.0	6.0	3.5	4.5
29	---	---	---	.0	.0	.0	4.0	2.5	3.0	5.5	3.5	4.5
30	---	---	---	.0	.0	.0	4.5	2.5	3.5	5.5	3.0	4.0
31	---	---	---	.0	.0	.0	---	---	---	6.0	4.0	5.0
MONTH	2.0	.0	.2	2.5	.0	.4	5.0	.0	1.5	6.5	2.0	4.0
JUNE				JULY			AUGUST			SEPTEMBER		
1	6.0	3.5	4.5	9.5	6.5	8.0	9.0	7.5	8.5	9.0	8.5	9.0
2	4.5	4.0	4.0	9.0	7.0	8.0	10.5	8.0	9.5	9.0	8.0	8.5
3	5.0	4.0	4.5	10.0	6.5	8.5	9.5	8.5	9.0	8.5	7.5	8.0
4	5.5	4.0	4.5	9.0	7.0	7.5	9.0	8.5	8.5	9.0	8.0	8.5
5	5.5	4.0	4.5	8.0	6.5	7.5	10.0	8.0	9.0	9.0	8.5	8.5
6	6.0	4.0	5.0	8.0	7.0	7.5	11.0	7.5	9.5	8.5	8.0	8.0
7	6.0	4.0	5.0	7.5	6.5	7.0	10.5	8.5	9.5	8.5	7.5	8.0
8	7.5	3.5	5.5	8.0	6.5	7.0	10.0	8.5	9.0	8.0	7.5	8.0
9	6.5	4.0	5.0	8.5	6.5	7.5	11.0	8.5	9.5	8.0	6.0	7.0
10	5.5	4.5	5.0	9.0	6.5	7.5	10.5	8.5	9.5	8.0	6.0	7.0
11	5.5	4.5	5.0	8.5	7.0	7.5	11.0	8.5	9.5	8.0	6.5	7.5
12	5.5	4.5	5.0	8.0	7.0	7.5	13.0	8.5	10.0	8.5	7.5	8.0
13	5.5	4.5	5.0	8.0	7.5	7.5	13.5	8.5	10.5	9.5	8.5	9.0
14	7.0	4.5	5.5	9.0	7.0	8.0	13.5	8.5	10.5	8.5	8.0	8.0
15	6.5	4.5	5.5	8.5	7.5	8.0	13.5	10.0	11.0	8.0	7.0	7.5
16	8.0	4.0	6.0	8.0	7.5	8.0	13.0	8.0	10.0	9.0	8.0	8.5
17	6.5	5.0	5.5	9.5	7.5	8.5	12.0	9.5	10.5	9.5	8.5	9.0
18	7.5	5.0	6.0	9.0	8.0	8.5	11.5	10.0	10.5	9.0	8.0	8.5
19	7.0	5.0	6.0	11.0	7.0	9.0	11.5	9.5	10.5	8.0	7.5	8.0
20	7.5	5.5	6.0	11.5	8.0	9.5	11.0	9.5	10.0	8.5	7.5	8.0
21	6.5	5.0	5.5	11.0	8.5	10.0	12.0	9.0	10.5	8.0	7.0	7.5
22	6.5	5.0	5.5	10.0	9.0	9.5	11.5	9.5	10.5	8.0	7.5	8.0
23	7.5	5.0	6.0	10.0	9.0	9.0	11.0	8.5	9.5	8.0	7.0	7.5
24	8.5	5.0	7.0	9.5	8.5	9.0	10.5	9.0	10.0	7.5	7.0	7.0
25	7.5	5.0	6.5	9.0	8.0	8.5	10.0	8.0	9.5	7.5	6.5	7.0
26	9.0	4.5	7.0	9.0	8.0	8.5	11.0	9.0	10.0	7.5	6.0	7.0
27	9.5	6.0	8.0	8.5	7.5	8.0	11.0	9.5	10.0	7.5	6.5	7.0
28	8.0	6.5	7.0	8.5	7.5	8.0	10.5	9.5	10.0	7.5	6.5	7.0
29	8.0	6.0	7.0	9.0	8.0	8.5	10.0	9.5	9.5	7.0	6.0	6.5
30	8.5	6.5	7.5	9.0	8.0	8.5	10.5	9.5	10.0	7.5	7.0	7.5
31	---	---	---	8.0	7.5	8.0	10.0	9.0	9.5	---	---	---
MONTH	9.5	3.5	5.7	11.5	6.5	8.2	13.5	7.5	9.8	9.5	6.0	7.8

15057590 KAHTAHEENA RIVER NEAR GUSTAVUS

LOCATION.--Lat 58°25'24", long 135°35'53", in SE¹/₄ NW¹/₄ NE¹/₄ sec. 12, T. 40 S., R. 59 E. (Juneau B-5 quad), Hydrologic Unit 19010302, in Glacier Bay National Park and Preserve, 1000 ft above the mouth at Icy Passage, 4.5 mi east of Gustavus, and 44 mi west of Juneau.

DRAINAGE AREA.--10.7 mi²

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1998 to April 2001 (discontinued).

REVISED RECORD.--WRD AK-00-1 1999

GAGE.--Water-stage recorder. Elevation of gage is 35 ft above sea level, from topographic map. Prior to April 2000, at a site 800 ft downstream at a different datum.

REMARKS.--Records fair, except for daily discharges above 150 ft³/s and estimated daily discharges, which are poor.

EXTREMES FOR CURRENT YEAR--Maximum discharge during period October to April, 629 ft³/s October 12, gage height 19.57; minimum discharge, 6.3 ft³/s, March 19, gage height 17.17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	38	48	35	59	28	8.9	---	---	---	---	---
2	31	31	42	63	39	18	8.6	---	---	---	---	---
3	30	113	33	273	44	15	8.1	---	---	---	---	---
4	27	60	38	76	31	13	---	---	---	---	---	---
5	70	44	333	58	25	12	---	---	---	---	---	---
6	76	39	108	80	22	14	---	---	---	---	---	---
7	132	48	61	55	20	31	---	---	---	---	---	---
8	119	36	43	44	17	32	---	---	---	---	---	---
9	94	30	33	36	15	31	---	---	---	---	---	---
10	95	26	29	30	e12	56	---	---	---	---	---	---
11	149	42	26	26	e11	97	---	---	---	---	---	---
12	252	44	22	23	26	46	---	---	---	---	---	---
13	246	32	17	22	38	38	---	---	---	---	---	---
14	157	29	e16	21	24	43	---	---	---	---	---	---
15	112	33	e15	26	e19	32	---	---	---	---	---	---
16	77	30	e14	27	e15	29	---	---	---	---	---	---
17	60	43	e13	61	e14	23	---	---	---	---	---	---
18	47	30	e15	40	e12	19	---	---	---	---	---	---
19	42	29	e14	35	e11	12	---	---	---	---	---	---
20	38	30	13	28	e9.7	e12	---	---	---	---	---	---
21	42	97	11	25	e9.7	e11	---	---	---	---	---	---
22	64	227	11	32	e13	e11	---	---	---	---	---	---
23	90	130	13	40	16	e11	---	---	---	---	---	---
24	70	79	12	30	15	e11	---	---	---	---	---	---
25	59	55	19	24	14	e10	---	---	---	---	---	---
26	46	43	36	23	19	e12	---	---	---	---	---	---
27	39	38	20	35	e120	e11	---	---	---	---	---	---
28	34	35	16	33	56	11	---	---	---	---	---	---
29	30	29	20	25	---	10	---	---	---	---	---	---
30	30	26	97	20	---	9.7	---	---	---	---	---	---
31	38	---	58	72	---	9.2	---	---	---	---	---	---
TOTAL	2430	1566	1246	1418	726.4	717.9	---	---	---	---	---	---
MEAN	78.4	52.2	40.2	45.7	25.9	23.2	---	---	---	---	---	---
MAX	252	227	333	273	120	97	---	---	---	---	---	---
MIN	27	26	11	20	9.7	9.2	---	---	---	---	---	---
AC-FT	4820	3110	2470	2810	1440	1420	---	---	---	---	---	---
CFSM	7.33	4.88	3.76	4.27	2.42	2.16	---	---	---	---	---	---
IN.	8.45	5.44	4.33	4.93	2.53	2.50	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)#

	1999	2000	2001	1999	2000	2001	1999	2000	2001	1999	2000	2001
MEAN	103	45.7	66.2	28.3	15.2	22.5	54.1	106	114	73.4	64.4	120
MAX	129	61.7	133	45.7	25.9	25.1	67.3	118	115	82.7	66.0	135
(WY)	2000	2000	2000	2001	2001	2000	1999	1999	2000	2000	2000	1999
MIN	78.4	23.1	25.2	19.0	7.70	19.2	40.9	93.5	113	64.1	62.8	105
(WY)	2001	1999	1999	1999	1999	1999	2000	2000	1999	1999	1999	2000

See period of record, partial years used in monthly statistics
e Estimated

15057590 KAHTAHEENA RIVER NEAR GUSTAVUS--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		WATER YEARS 1999 - 2001#	
ANNUAL TOTAL	22338.2			
ANNUAL MEAN	61.0		68.7	
HIGHEST ANNUAL MEAN			74.0	2000
LOWEST ANNUAL MEAN			63.3	1999
HIGHEST DAILY MEAN	333	Dec 5	1140	Dec 27 1999
LOWEST DAILY MEAN	5.5	Mar 10	5.5	Mar 10 2000
ANNUAL SEVEN-DAY MINIMUM	7.4	Feb 11	6.8	Feb 11 1999
MAXIMUM PEAK FLOW			a1980	Dec 27 1999
MAXIMUM PEAK STAGE			b22.18	Dec 27 1999
INSTANTANEOUS LOW FLOW			5.5	Mar 10 2000
ANNUAL RUNOFF (AC-FT)	44310		49740	
ANNUAL RUNOFF (CFSM)	5.70		6.42	
ANNUAL RUNOFF (INCHES)	77.66		87.18	
10 PERCENT EXCEEDS	126		132	
50 PERCENT EXCEEDS	44		42	
90 PERCENT EXCEEDS	12		11	

See Period of Record, partial years used in monthly statistics

a From rating curve extended above 450 ft³/s on the basis of a slope-area measurement of peak flow at gage height 21.67 ft site and datum then in use

b Site and datum then in use

15057590 KAHTAHEENA RIVER NEAR GUSTAVUS--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1999 to April 2001 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1998 to April 2001.

INSTRUMENTATION.-- Electronic water-temperature recorder set for 1-hour recording interval.

REMARKS.--Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross sections on January 25. Temperature cross sections found no variation. No variation was found between mean stream temperature and sensor temperature.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 13.5°C, August 4-6, 1999; minimum, 0.0°C, on many days during the winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 8.0 C October 12 ; minimum, 0.0°C, on many days during the winter.

WATER-QUALITY DATA

DATE	TIME	STREAM WIDTH (FT) (000004)	SAMPLE LOC- ATION, CROSS SECTION (FT FM R BK) (72103)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)
JAN 2001							
25...	1242	19.0	17.0	17.51	22	2.0	3.5
25...	1243	19.0	22.0	17.51	22	2.0	3.5
25...	1244	19.0	27.0	17.51	22	2.0	3.5
25...	1245	19.0	32.0	17.51	22	2.0	3.5

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	4.5	3.0	3.5	4.0	3.0	3.5	2.5	1.5	2.0	2.0	1.5	2.0
2	4.0	3.0	3.5	4.0	3.0	3.5	3.0	2.5	2.5	2.0	1.5	2.0
3	3.5	2.5	3.0	4.5	4.0	4.5	3.0	2.5	2.5	2.0	1.5	2.0
4	3.5	2.0	3.0	4.0	2.5	3.0	3.0	2.5	3.0	2.5	2.0	2.0
5	6.5	3.5	5.0	3.0	2.5	3.0	3.5	2.5	3.0	2.5	2.0	2.0
6	7.0	6.5	7.0	3.5	3.0	3.5	3.5	3.5	3.5	2.0	2.0	2.0
7	7.5	6.5	7.0	4.0	3.5	4.0	3.5	2.5	3.0	3.0	2.0	2.5
8	6.5	5.5	6.0	4.0	3.0	3.5	2.5	1.0	2.0	3.0	2.5	2.5
9	6.5	6.0	6.0	3.0	2.0	2.5	1.0	.5	.5	2.5	1.0	2.0
10	6.5	5.5	6.0	2.5	2.0	2.0	1.5	.5	1.0	1.0	.5	.5
11	7.0	5.5	6.5	4.0	2.5	3.5	1.5	1.0	1.5	1.5	.5	1.0
12	8.0	6.5	7.0	4.0	3.5	4.0	1.0	.0	.5	1.0	.5	.5
13	7.0	6.5	6.5	4.0	3.0	3.5	.5	.0	.0	1.5	1.0	1.0
14	6.5	6.0	6.0	4.0	3.5	4.0	.0	.0	.0	2.0	1.0	1.5
15	6.5	6.0	6.0	4.0	3.0	4.0	.0	.0	.0	2.0	2.0	2.0
16	6.0	5.5	6.0	3.5	3.0	3.0	.0	.0	.0	2.0	2.0	2.0
17	6.0	5.0	5.5	4.0	3.5	3.5	.0	.0	.0	2.5	2.0	2.0
18	5.5	4.5	5.0	3.5	3.0	3.5	.0	.0	.0	2.5	2.0	2.5
19	5.5	5.0	5.5	3.5	3.0	3.5	.0	.0	.0	2.5	2.0	2.5
20	5.5	5.0	5.0	4.5	3.5	4.0	.5	.0	.5	2.5	1.5	2.0
21	5.0	5.0	5.0	5.0	4.5	5.0	.5	.0	.0	2.5	2.5	2.5
22	6.0	5.0	5.5	5.0	4.0	4.5	.0	.0	.0	3.0	2.5	2.5
23	6.0	5.5	5.5	4.0	3.5	4.0	.5	.0	.0	2.5	1.5	2.0
24	5.5	5.0	5.5	4.0	3.5	4.0	.5	.0	.5	2.0	1.5	1.5
25	5.0	4.5	5.0	3.5	3.5	3.5	.5	.0	.5	2.0	2.0	2.0
26	5.0	4.0	4.5	3.5	3.0	3.5	.5	.0	.0	2.5	2.0	2.0
27	4.0	3.5	3.5	3.5	3.5	3.5	.5	.0	.5	2.5	2.5	2.5
28	4.0	3.0	3.5	3.5	2.0	3.0	1.0	.5	.5	2.5	1.5	2.0
29	3.0	1.5	2.0	2.0	1.5	1.5	1.5	.5	1.0	2.0	1.5	1.5
30	3.5	2.0	2.5	2.0	2.0	2.0	1.5	.0	.5	2.0	1.5	1.5
31	4.0	3.5	4.0	---	---	---	1.5	1.5	1.5	2.0	1.0	1.5
MONTH	8.0	1.5	5.0	5.0	1.5	3.5	3.5	.0	1.0	3.0	.5	1.9

15057590 KAHTAHEENA RIVER NEAR GUSTAVUS--Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	2.5	2.0	2.0	1.0	.5	.5	.5	.0	.5	---	---	---
2	2.5	2.0	2.0	.5	.0	.5	.5	.0	.5	---	---	---
3	2.5	1.5	2.0	1.0	.0	.5	---	---	---	---	---	---
4	1.5	1.0	1.5	.5	.0	.5	---	---	---	---	---	---
5	1.0	.5	1.0	1.0	.0	.5	---	---	---	---	---	---
6	.5	.0	.5	1.0	.5	.5	---	---	---	---	---	---
7	1.0	.5	.5	1.0	.5	.5	---	---	---	---	---	---
8	1.0	.0	.5	1.0	.5	1.0	---	---	---	---	---	---
9	.5	.0	.0	1.5	.5	1.0	---	---	---	---	---	---
10	.5	.0	.0	1.5	.5	1.0	---	---	---	---	---	---
11	.5	.0	.0	1.5	1.0	1.5	---	---	---	---	---	---
12	.0	.0	.0	2.0	1.0	1.5	---	---	---	---	---	---
13	.0	.0	.0	2.5	1.0	1.5	---	---	---	---	---	---
14	.0	.0	.0	2.5	1.5	2.0	---	---	---	---	---	---
15	.0	.0	.0	2.5	2.0	2.0	---	---	---	---	---	---
16	.0	.0	.0	2.5	1.5	2.0	---	---	---	---	---	---
17	.0	.0	.0	2.5	1.5	2.0	---	---	---	---	---	---
18	.0	.0	.0	2.0	.5	1.5	---	---	---	---	---	---
19	.0	.0	.0	.5	.5	.5	---	---	---	---	---	---
20	.0	.0	.0	.5	.0	.0	---	---	---	---	---	---
21	.0	.0	.0	.5	.0	.0	---	---	---	---	---	---
22	.0	.0	.0	.0	.0	.0	---	---	---	---	---	---
23	.0	.0	.0	.0	.0	.0	---	---	---	---	---	---
24	.0	.0	.0	.0	.0	.0	---	---	---	---	---	---
25	.0	.0	.0	.0	.0	.0	---	---	---	---	---	---
26	.0	.0	.0	.0	.0	.0	---	---	---	---	---	---
27	.0	.0	.0	.0	.0	.0	---	---	---	---	---	---
28	.5	.0	.5	.5	.0	.0	---	---	---	---	---	---
29	---	---	---	.5	.0	.0	---	---	---	---	---	---
30	---	---	---	.5	.0	.5	---	---	---	---	---	---
31	---	---	---	.5	.0	.5	---	---	---	---	---	---
MONTH	2.5	.0	.4	2.5	.0	.7	---	---	---	---	---	---

15070000 SWAN LAKE NEAR KETCHIKAN

LOCATION.--Lat 55°36'54", long 131°20'14", in SW¹/₄ NE¹/₄ sec. 20, T. 72 S., R. 92 E. (Ketchikan C-4 quad), Hydrologic Unit 19010102, Ketchikan Gateway Borough, on Revillagigedo Island, in Tongass National Forest, 0.7 mi upstream from mouth at Carroll Inlet, and 22 mi northeast of Ketchikan.

DRAINAGE AREA.--36.5 mi².

PERIOD OF RECORD.--September 1916 to January 1926, September 1927 to December 1933 and October 1946 to September 1959 (discharge). Published as "Swan Lake Outlet at Carroll Inlet" prior to 1946 and as "Falls Creek near Ketchikan" October 1946 to September 1959. Monthly discharges only for some periods, published in WSP 1372. October 1984 to current year (month end reservoir contents and monthly discharges).

REVISED RECORDS.--WSP 1372: Drainage area, 1918.

GAGE.--Non-recording lake-level staff gage. Datum of lake-level staff gage is at sea level. Totalizing MWH meters on the two turbines in Swan Lake Powerhouse. September 1916 to January 1926 and September 1927 to December 1933 at site 1,500 ft downstream at different datum. October 1946 to September 1959, recording gage at site 2,500 ft downstream, elevation of gage was 130 ft above sea level, from topographic map.

REMARKS.--Reservoir is formed by a concrete arch dam located at the outlet of Swan Lake; construction began in August 1980 and was completed in March 1983. Total and usable capacities below spillway crest of 330 ft are 126,200 and 82,800 acre-ft, respectively. Reservoir is used for power. Discharge released through turbines is computed from relation between discharge, head, and power generation; release flow enters directly into Carroll Inlet and is not returned to stream. Spill is computed from a theoretical relation between discharge and stage above crest of the spillway. Turbine and spillway ratings and reservoir capacity table furnished by the City of Ketchikan in 1985.

COOPERATION.--Reservoir elevations and release flow provided by the City of Ketchikan.

AVERAGE DISCHARGE.--45 years (water years 1917-25, 1928-33, 1947-59, 1985-2001), 444 ft³/s, 165.2 in/yr, 321,700 acre-ft/yr. Mean discharge for water years 1985-2001 adjusted for change in contents of Swan Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 132,200 acre-ft, November 29, 1987, elevation, 334.2 ft; minimum contents observed, 51,770 acre-ft, September 22, 1993, elevation, 278.4 ft. Maximum discharge, about 5,500 ft³/s, November 1, 1917; minimum daily discharge, 19 ft³/s, February 21 to 25, 1925. Maximum daily discharge since construction of dam, 3,680 ft³/s, November 30, 1988; no flow released several days most years.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 131,960 acre-ft, September 23, 2001, elevation, 334.00 ft; minimum contents observed, 77,556 acre-ft, April 16, 2001, elevation, 296.4 ft. Maximum release from reservoir (mean daily, not adjusted for changes in storage), 2,213 ft³/s, September 23, 2001; minimum release, undetermined.

MONTH END RESERVOIR ELEVATION, IN FEET ABOVE SEA LEVEL, AND CONTENTS, IN ACRE FEET
WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ELEVATION	CONTENTS	CHANGE IN CONTENTS
SEP 30	329.0	124,700	
OCT 31	328.6	124,140	-560
NOV 30	329.7	125,740	+1,600
DEC 31	317.7	108,380	-17,360
JAN 31	319.1	110,400	+2,020
FEB 28	305.6	90,860	-19,540
MAR 31	300.3	83,200	-7,660
APR 30	301.6	85,080	+1,880
MAY 31	302.5	86,380	+1,300
JUN 30	317.6	108,230	+21,850
JUL 31	321.3	113,580	+5,350
AUG 31	322.5	115,320	+1,740
SEP 30	333.9	131,880	+16,560
		CAL YR 2000	-8,390
		WTR YR 2001	+7,180

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
MEAN VALUES

MONTH	RELEASE	SPILL	TOTAL	ADJUSTED
OCT	373	0.2	373.2	364
NOV	398	0.1	398.1	425
DEC	498	0.1	498.1	216
JAN	473	0	473	506
FEB	522	0	522	170
MAR	309	0	309	184
APR	309	0	309	341
MAY	528	0	528	549
JUN	337	0	337	704
JUL	401	0	401	488
AUG	431	0	431	459
SEP	681	282	963	1241
CAL YR 2000	431	0.03	431	419
WTR YR 2001	438	23.2	461	471

15072000 FISH CREEK NEAR KETCHIKAN

LOCATION.--Lat 55°23'31", long 131°11'38", in SW¹/₄SW¹/₄ sec. 6, T. 75 S., R. 94 E. (Ketchikan B-4 quad.), Gateway Borough, Hydrologic Unit 19010102, on Revillagigedo Island, in Tongass National Forest, on right bank 250 ft upstream from outlet of Low Lake, 750 ft upstream from mouth at Thorne Arm, and 18 mi east of Ketchikan.

DRAINAGE AREA.--32.1 mi², excludes that of Granite Lake drainage basin.

PERIOD OF RECORD.--May 1915 to October 1936, October 1938 to current year. Prior to October 1945, monthly discharge only. Records of daily discharge prior to October 1945 are available in computer files of the Geological Survey. Prior to January 1921, published as "near Sea Level, Revillagigedo Island."

REVISED RECORDS.--WSP 1372: 1918.

GAGE.--Water-stage recorder. Elevation of gage is 20 ft above sea level, by barometer. Prior to October 1935, at site 150 ft downstream at different datum. October 1935 to October 3, 1975, at prior site and present datum.

REMARKS.--No estimated daily discharges. Records fair. GOES satellite telemetry at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,200 ft³/s and/or maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
*Sep 23	0230	*3280	*4.16	No other peak greater than base discharge			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	709	327	614	443	686	233	217	723	993	373	184	990
2	550	378	914	923	843	215	192	618	839	344	200	1640
3	453	669	902	1600	912	211	172	792	682	332	207	1910
4	384	681	687	1620	713	201	175	731	570	347	205	1920
5	325	560	588	1730	538	176	184	608	504	412	210	1490
6	280	466	781	1410	417	163	170	487	477	538	219	1410
7	328	466	698	1010	336	181	155	485	463	933	225	1080
8	383	400	539	880	286	182	145	465	448	1010	217	771
9	389	335	422	827	245	169	140	426	458	1040	203	590
10	370	288	337	685	216	184	134	375	462	902	188	460
11	345	247	283	539	191	357	129	479	443	708	175	370
12	361	294	238	418	170	447	131	502	416	567	163	317
13	451	292	210	339	160	381	132	520	402	559	152	279
14	442	247	183	288	167	318	130	511	427	621	143	244
15	798	218	160	261	160	285	125	473	448	580	136	218
16	766	199	155	316	148	307	124	478	448	488	130	196
17	656	246	137	359	136	328	130	609	442	454	125	183
18	572	291	198	368	127	286	149	673	418	427	122	196
19	565	288	180	396	118	266	167	691	415	381	120	236
20	554	282	150	386	109	243	174	569	575	342	146	346
21	499	297	132	380	103	214	180	507	720	321	342	500
22	779	690	121	324	96	190	188	656	691	311	393	1920
23	844	1230	110	291	90	170	319	773	618	296	380	2910
24	680	1500	104	261	86	155	717	689	594	280	435	1840
25	525	1470	208	241	83	150	635	576	578	261	612	1410
26	418	1190	329	223	80	158	572	499	520	241	1080	1140
27	348	911	371	295	139	239	652	463	471	225	1570	1000
28	337	683	305	343	261	242	799	448	462	215	1290	988
29	310	523	283	305	---	222	771	460	449	204	869	1030
30	289	446	318	274	---	219	829	469	413	193	670	1410
31	305	---	397	400	---	248	---	795	---	185	664	---
TOTAL	15015	16114	11054	18135	7616	7340	8737	17550	15846	14090	11775	28994
MEAN	484	537	357	585	272	237	291	566	528	455	380	966
MAX	844	1500	914	1730	912	447	829	795	993	1040	1570	2910
MIN	280	199	104	223	80	150	124	375	402	185	120	183
MED	442	389	283	380	164	219	173	511	462	373	207	989
AC-FT	29780	31960	21930	35970	15110	14560	17330	34810	31430	27950	23360	57510
CFSM	15.1	16.7	11.1	18.2	8.47	7.38	9.07	17.6	16.5	14.2	11.8	30.1
IN.	17.40	18.67	12.81	21.02	8.83	8.51	10.13	20.34	18.36	16.33	13.65	33.60

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 2001, BY WATER YEAR (WY)#

	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
MEAN	699	567	421	350	318	264	355	504	471	335	332	441
MAX	1326	1767	1081	975	944	673	655	867	764	718	767	966
(WY)	1975	1918	1931	1926	1993	1986	1949	1999	1951	1976	1972	2001
MIN	237	89.2	83.4	37.9	37.8	71.4	130	182	142	65.3	50.7	80.0
(WY)	1926	1974	1984	1950	1969	1969	1967	1998	1998	1958	1965	1965

See period of record

15072000 FISH CREEK NEAR KETCHIKAN--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1915 - 2001#	
ANNUAL TOTAL	177723		172266			
ANNUAL MEAN	486		472		422	
HIGHEST ANNUAL MEAN					556	1992
LOWEST ANNUAL MEAN					302	1978
HIGHEST DAILY MEAN	3040	Aug 22	2910	Sep 23	4410	Oct 15 1961
LOWEST DAILY MEAN	89	Jan 26	80	Feb 26	20	Sep 9 1928
ANNUAL SEVEN-DAY MINIMUM	100	Jan 20	92	Feb 20	23	Sep 5 1928
MAXIMUM PEAK FLOW			3280	Sep 23	a5400	Oct 15 1961
MAXIMUM PEAK STAGE			4.16	Sep 23	b5.85	Oct 15 1961
INSTANTANEOUS LOW FLOW			76	Feb 26	20	Sep 9 1928
ANNUAL RUNOFF (AC-FT)	352500		341700		306000	
ANNUAL RUNOFF (CFSM)	15.1		14.7		13.2	
ANNUAL RUNOFF (INCHES)	205.96		199.64		178.79	
10 PERCENT EXCEEDS	896		906		864	
50 PERCENT EXCEEDS	406		375		319	
90 PERCENT EXCEEDS	179		150		98	

See Period of Record

a From rating curve extended above 3,600 ft³/s

b At site then in use

15081495 NORTH FORK STANEY CREEK NEAR KLAWOCK

LOCATION.--Lat 55°43'58", long 132°58'02", in NE¹/₄ NE¹/₄ sec. 10, T. 71 S., R. 81 E. (Craig C-4 quad), Hydrologic Unit 19010103, on Prince of Wales Island, in Tongass National Forest, on left bank, immediately upstream from bridge on Forest Road 2050, 6 mi upstream from Middle Fork Stanley Creek and 12.4 mi north of Klawock.

DRAINAGE AREA.--3.07 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1990 to current year.

REVISED RECORDS.--WDR AK-92-1: 1991. WDR AK-00-1: 1990(M), 1991-92(P), 1993, 1994-99(P).

GAGE.--Water-stage recorder. Elevation of gage is 600 ft above sea level, from topographic map.

REMARKS.--Records good except for those above 200 ft³/s which are fair and estimated daily discharges which are poor.

EXTREMES FOR CURRENT YEAR.-- Peak discharges greater than base discharge of 350 ft³/s (revised) and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sep 30	0015	*612	*5.19	No other peak greater than base discharge			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	12	79	35	38	15	5.9	14	24	3.8	2.0	62
2	8.4	24	54	96	35	13	4.3	18	16	3.4	2.1	48
3	12	61	2.4	132	26	11	3.6	48	10	3.1	1.8	54
4	7.7	5.8	3.2	44	10	8.5	7.2	17	9.4	4.8	1.6	25
5	34	11	104	96	6.2	6.1	7.2	8.7	11	8.7	1.4	51
6	56	25	27	38	5.0	6.9	6.0	5.9	12	32	1.4	19
7	44	19	4.9	24	4.3	24	5.7	15	11	20	1.3	9.9
8	19	5.1	2.8	40	3.9	9.7	5.2	47	10	19	1.2	9.3
9	16	1.9	1.9	19	3.5	12	5.6	16	14	19	1.2	5.4
10	8.5	1.3	1.4	9.4	e3.0	87	5.6	13	13	8.4	1.1	3.9
11	46	3.0	1.2	6.0	e2.8	141	6.0	22	8.7	5.4	1.0	4.0
12	40	22	e1.1	4.5	e2.5	19	8.2	19	7.0	5.3	1.0	8.3
13	20	4.3	e.95	4.6	e14	10	6.2	14	8.4	15	1.0	6.4
14	9.8	1.8	e.90	4.6	e12	6.4	6.3	14	14	11	.98	4.1
15	47	1.3	e.85	28	e15	7.2	7.1	15	11	7.0	.97	3.5
16	26	2.8	e.80	59	e4.4	7.9	9.2	18	9.5	7.2	.97	11
17	9.3	40	e.75	24	e3.2	13	18	21	8.1	9.1	.97	41
18	6.5	2.3	e.85	23	e2.9	9.5	18	24	6.9	4.7	1.7	89
19	14	2.6	e1.0	15	e2.7	10	13	19	7.1	3.5	2.1	91
20	84	1.3	e.90	16	e2.5	4.9	10	13	18	2.8	3.9	36
21	13	.83	e.80	24	e2.4	e3.4	9.2	19	21	2.4	45	45
22	46	41	e.70	19	e2.2	2.5	10	41	13	2.2	8.0	126
23	34	48	e.55	26	e2.1	e2.2	43	14	10	2.4	10	40
24	8.0	29	e.60	25	e2.0	2.5	30	10	17	2.4	15	14
25	4.8	21	22	13	2.2	12	19	8.0	13	2.1	24	14
26	3.3	8.3	6.6	7.7	5.2	10	38	8.8	8.8	2.0	30	12
27	5.7	11	5.5	49	80	11	48	11	5.6	1.9	88	17
28	8.4	4.4	5.2	26	22	9.8	15	11	4.9	1.9	10	14
29	3.3	1.4	12	9.8	---	8.5	20	12	3.8	1.8	10	126
30	9.2	1.4	24	7.2	---	9.2	19	14	3.3	1.7	11	218
31	27	---	8.6	87	---	9.4	---	29	---	1.7	14	---
TOTAL	689.9	413.83	376.45	1011.8	315.0	502.6	409.5	559.4	329.5	215.7	294.69	1207.8
MEAN	22.3	13.8	12.1	32.6	11.2	16.2	13.6	18.0	11.0	6.96	9.51	40.3
MAX	84	61	104	132	80	141	48	48	24	32	88	218
MIN	3.3	.83	.55	4.5	2.0	2.2	3.6	5.9	3.3	1.7	.97	3.5
AC-FT	1370	821	747	2010	625	997	812	1110	654	428	585	2400
CFM	7.25	4.49	3.96	10.6	3.66	5.28	4.45	5.88	3.58	2.27	3.10	13.1
IN.	8.36	5.01	4.56	12.26	3.82	6.09	4.96	6.78	3.99	2.61	3.57	14.64

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2001, BY WATER YEAR (WY)#

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	34.3	24.1	27.7	26.7	20.4	16.7	17.8	14.4	9.03	5.94	9.80	25.2
MAX	61.1	40.2	49.1	48.9	51.7	35.1	29.7	33.8	21.0	11.8	17.9	45.1
(WY)	2000	1994	1991	1997	1993	1994	1997	1999	1999	1997	1998	1994
MIN	18.5	12.9	11.5	12.0	7.51	7.38	7.76	3.87	1.59	1.46	1.80	10.4
(WY)	1993	1997	1997	1996	2000	1991	1998	1998	1993	1993	1993	1993

See Period of Record; partial years used in monthly summary statistics
e Estimated

15081495 NORTH FORK STANEY CREEK NEAR KLAWOCK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1990 - 2001#	
ANNUAL TOTAL	5978.04		6326.17			
ANNUAL MEAN	16.3		17.3		19.5	
HIGHEST ANNUAL MEAN					24.7	
LOWEST ANNUAL MEAN					15.4	
HIGHEST DAILY MEAN	218	Aug 21	218	Sep 30	793	Oct 26 1993
LOWEST DAILY MEAN	.55	Dec 23	.55	Dec 23	.38	Jul 21 1993
ANNUAL SEVEN-DAY MINIMUM	.77	Dec 18	.77	Dec 18	.49	Jul 15 1993
MAXIMUM PEAK FLOW			612	Sep 30	a1110	Jan 29 1993
MAXIMUM PEAK STAGE			5.19	Sep 30	6.34	Jan 29 1993
INSTANTANEOUS LOW FLOW					b.37	Jul 20 1993
ANNUAL RUNOFF (AC-FT)	11860		12550		14100	
ANNUAL RUNOFF (CFSM)	5.32		5.65		6.34	
ANNUAL RUNOFF (INCHES)	72.44		76.66		86.11	
10 PERCENT EXCEEDS	39		43		43	
50 PERCENT EXCEEDS	9.6		9.7		9.2	
90 PERCENT EXCEEDS	1.6		1.7		2.2	

See Period of Record; partial years used in monthly summary statistics

a From rating extended above 140 ft³/s

b Jul. 20 and 21, 1993

15081495 NORTH FORK STANEY CREEK NEAR KLAWOCK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1991 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: November 1990 to current year.

INSTRUMENTATION.--Electronic water temperature recorder since November 20, 1990, set for 2-hour recording interval. New water temperature recorder installed April 11, 1996 with a 15-minute recording interval.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on August 27. No variation was found within the cross section. No variation was found between mean stream temperature and sensor temperature.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE.--Maximum recorded, 18.5° C, June 30, 1992, July 16, 1993, and July 2-4, 1998; minimum, 0.0°C, on many days during winters.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE.--Maximum, 17.0°C August 13; minimum, 0.0°C, on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	STREAM WIDTH (FT) (00004)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)
AUG							
27...	1332	28.5	1.5	2.64	45	10.5	14.0
27...	1333	28.5	6.5	2.64	45	10.5	14.0
27...	1334	28.5	11.5	2.64	45	10.5	14.0
27...	1335	28.5	16.5	2.64	45	10.5	14.0
27...	1336	28.5	21.5	2.64	45	10.5	14.0
27.. .	1337	28.5	26.5	2.64	45	10.5	14.0

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.0	6.0	7.0	5.0	4.5	4.5	4.0	3.5	4.0	2.0	1.5	2.0
2	6.5	5.0	6.0	6.5	5.0	5.5	4.5	4.0	4.0	3.0	2.0	2.5
3	7.0	6.0	6.5	6.5	5.5	6.5	4.0	3.5	3.5	2.5	2.5	2.5
4	7.5	6.5	7.0	5.5	4.5	5.0	3.5	3.0	3.5	2.5	2.0	2.5
5	7.5	7.0	7.0	5.5	4.5	5.0	4.5	3.5	4.0	3.0	2.5	2.5
6	8.0	7.5	7.5	5.5	5.0	5.0	4.5	3.0	4.0	2.5	2.0	2.5
7	8.0	7.5	8.0	5.0	4.5	5.0	3.0	2.5	2.5	3.0	2.0	2.5
8	7.5	6.5	7.0	5.0	4.0	4.5	2.5	1.5	2.5	3.0	2.5	2.5
9	7.5	6.5	7.0	4.0	3.0	3.5	1.5	.5	1.0	2.5	1.5	2.0
10	7.0	6.5	7.0	3.0	2.5	2.5	.5	.0	.5	1.5	1.0	1.5
11	8.0	7.0	7.5	4.0	2.5	3.0	.5	.0	.0	1.0	.0	.5
12	8.5	7.5	8.0	4.5	4.0	4.5	.0	.0	.0	.5	.0	.0
13	8.0	7.0	7.5	4.0	3.0	4.0	.0	.0	.0	1.0	.5	.5
14	7.0	6.5	7.0	3.5	3.0	3.0	.0	.0	.0	1.0	.5	1.0
15	7.5	7.0	7.0	3.5	3.0	3.5	.0	.0	.0	1.5	1.0	1.5
16	7.0	6.0	6.5	4.5	3.5	4.0	.0	.0	.0	2.0	1.5	2.0
17	7.0	6.5	7.0	4.5	3.0	4.0	.0	.0	.0	2.5	2.0	2.5
18	7.0	6.5	7.0	3.5	2.5	3.0	.0	.0	.0	3.0	2.0	2.5
19	6.5	6.0	6.0	4.5	3.5	4.0	.0	.0	.0	2.0	2.0	2.0
20	6.0	6.0	6.0	5.0	4.5	5.0	.0	.0	.0	2.5	2.0	2.5
21	6.0	5.0	5.5	5.5	5.0	5.5	.0	.0	.0	2.5	2.0	2.0
22	7.0	6.0	6.5	6.0	5.5	5.5	.0	.0	.0	2.5	2.0	2.5
23	7.0	6.0	6.5	5.5	4.5	5.0	.0	.0	.0	3.0	2.5	3.0
24	6.0	5.5	6.0	4.5	4.5	4.5	.0	.0	.0	3.5	3.0	3.0
25	5.5	4.5	4.5	4.5	4.0	4.5	.0	.0	.0	3.5	3.0	3.0
26	5.0	4.0	4.5	4.0	3.5	4.0	.5	.0	.0	3.0	2.5	3.0
27	5.0	5.0	5.0	3.5	3.0	3.5	1.0	.5	.5	3.0	3.0	3.0
28	5.5	5.0	5.5	3.0	2.0	2.5	1.0	1.0	1.0	3.0	1.5	2.0
29	5.0	3.5	4.5	2.5	2.0	2.5	1.5	1.0	1.5	1.5	1.0	1.5
30	4.5	3.5	4.0	3.5	2.5	2.5	2.0	1.5	2.0	1.5	.5	1.0
31	5.0	4.5	5.0	---	---	---	1.5	1.0	1.5	2.0	1.0	1.5
MONTH	8.5	3.5	6.4	6.5	2.0	4.2	4.5	.0	1.2	3.5	.0	2.0

15081495 NORTH FORK STANEY CREEK NEAR KLAWOCK--Continued

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	2.5	2.0	2.5	.5	.5	.5	2.0	.0	1.0	5.5	3.0	4.0
2	3.0	2.5	2.5	2.0	.5	1.0	2.5	.0	1.0	4.0	3.0	3.5
3	2.5	1.5	2.0	1.0	.5	1.0	3.0	.0	1.5	4.0	3.0	3.5
4	1.5	.5	1.0	2.0	.5	1.0	2.5	.5	1.5	5.0	3.0	4.0
5	1.0	.5	.5	1.5	.5	1.0	3.0	.5	1.5	5.5	3.0	4.0
6	.5	.0	.0	2.0	1.0	1.5	4.0	1.0	2.0	5.0	3.0	4.0
7	1.0	.0	.5	2.0	1.0	1.5	3.5	.5	2.0	4.5	3.5	4.0
8	1.0	.5	.5	2.0	1.0	1.5	2.5	1.0	1.5	3.5	3.0	3.0
9	.5	.0	.5	2.0	1.0	1.5	3.5	1.0	2.5	5.0	2.5	3.5
10	.5	.0	.0	1.5	1.0	1.5	4.5	1.0	2.5	5.0	3.5	4.0
11	.0	.0	.0	2.0	1.5	1.5	3.0	1.5	2.5	5.0	3.5	4.0
12	.0	.0	.0	2.5	1.5	2.0	3.5	1.5	2.5	5.5	3.5	4.5
13	.0	.0	.0	2.5	1.0	2.0	3.5	1.0	2.5	6.0	3.5	4.5
14	.0	.0	.0	2.0	.5	1.5	5.0	2.0	3.5	6.0	4.0	5.0
15	.0	.0	.0	3.0	1.5	2.0	5.0	1.5	3.0	5.5	3.5	4.5
16	.0	.0	.0	2.5	1.5	2.0	4.0	1.5	3.0	5.0	3.5	4.5
17	.0	.0	.0	3.0	1.5	2.5	3.0	2.0	2.5	5.5	3.5	4.5
18	.0	.0	.0	2.5	2.0	2.0	4.0	2.0	2.5	4.5	3.5	4.0
19	.0	.0	.0	2.0	1.0	1.5	4.5	2.0	3.0	6.0	3.5	4.5
20	.5	.0	.0	1.0	.0	.5	4.5	1.5	3.0	4.5	3.5	4.0
21	.5	.0	.0	.5	.0	.0	5.5	2.0	3.5	6.0	4.0	5.0
22	.5	.0	.0	.5	.0	.0	4.5	3.0	3.5	6.5	4.5	5.5
23	.5	.0	.0	.5	.0	.0	3.0	2.0	2.5	6.5	4.0	5.0
24	.0	.0	.0	1.0	.0	.5	3.5	2.0	3.0	6.5	4.0	5.5
25	.0	.0	.0	1.0	.5	.5	5.0	2.5	3.5	8.0	4.0	6.0
26	.5	.0	.0	1.5	.0	.5	4.5	3.0	3.5	7.0	5.0	6.0
27	.5	.0	.0	2.0	.5	1.0	4.0	3.0	3.5	7.0	5.0	6.0
28	.5	.0	.5	1.0	.0	.5	4.5	2.5	3.5	6.5	4.5	5.5
29	---	---	---	2.0	.0	1.0	4.0	3.0	3.5	8.0	5.0	6.5
30	---	---	---	.5	.0	.5	4.5	3.0	3.5	6.5	5.0	5.5
31	---	---	---	2.0	.0	1.0	---	---	---	6.5	5.5	5.5
MONTH	3.0	.0	.4	3.0	.0	1.1	5.5	.0	2.6	8.0	2.5	4.6

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	6.5	5.0	5.5	12.5	10.5	11.5	12.5	11.5	12.0	9.5	9.5	9.5
2	6.5	5.0	5.5	12.0	10.0	11.0	13.5	11.5	12.5	9.5	8.5	9.0
3	7.0	5.5	6.0	12.5	10.5	11.0	14.0	10.5	12.5	9.5	8.5	9.0
4	7.5	5.5	6.5	11.0	10.5	11.0	13.0	12.0	12.5	10.0	9.0	9.5
5	7.5	5.5	6.5	10.5	9.0	9.5	14.0	11.5	12.5	9.5	9.0	9.5
6	7.5	5.5	6.5	9.5	8.5	9.0	14.0	12.0	13.0	10.0	8.5	9.5
7	8.0	6.0	7.0	9.5	8.5	9.0	14.5	11.0	13.0	9.5	9.0	9.0
8	9.0	6.0	7.5	9.0	8.5	8.5	16.0	11.5	14.0	10.5	8.5	9.5
9	7.5	6.5	7.0	9.5	8.0	9.0	16.0	12.0	14.0	10.0	8.5	9.5
10	8.0	6.0	7.0	10.0	8.5	9.0	16.0	12.0	14.5	10.0	7.5	9.0
11	7.5	6.5	7.0	10.5	8.5	9.5	15.0	13.0	14.0	9.5	8.5	9.0
12	9.0	6.5	7.5	9.5	9.0	9.5	16.0	12.0	14.5	9.5	9.0	9.0
13	8.0	7.0	7.5	9.0	8.5	9.0	17.0	12.5	15.0	10.5	9.0	9.5
14	9.0	6.5	7.5	9.5	8.5	9.0	15.5	14.0	14.5	10.5	9.0	10.0
15	9.0	7.0	8.0	11.0	8.5	10.0	16.5	13.5	15.0	11.5	10.0	10.5
16	8.0	7.0	7.5	10.5	9.5	10.0	16.5	13.0	15.0	11.5	10.5	11.0
17	8.5	7.0	7.5	11.0	9.0	10.0	15.0	14.0	14.5	11.5	10.5	11.0
18	11.0	7.5	9.0	12.5	9.5	11.0	14.5	13.0	13.5	10.5	9.5	10.0
19	10.0	8.5	9.0	14.5	10.5	12.5	14.0	12.5	13.5	9.5	9.0	9.5
20	9.5	8.0	9.0	15.5	11.5	13.5	13.0	11.0	12.5	9.5	9.0	9.0
21	9.0	7.5	8.0	16.5	12.5	14.5	11.0	10.5	11.0	9.5	9.0	9.0
22	9.5	7.5	8.5	14.5	13.0	14.0	11.5	10.5	11.0	9.5	9.0	9.0
23	8.5	8.0	8.0	13.0	11.5	12.5	11.5	10.0	11.0	9.0	8.0	8.5
24	9.0	7.5	8.5	12.5	11.0	12.0	10.5	10.0	10.0	8.5	8.0	8.5
25	9.0	8.0	8.5	13.5	11.0	12.0	10.5	10.0	10.0	9.0	8.0	8.5
26	11.5	7.5	9.5	14.0	11.5	12.5	10.5	9.5	10.0	8.5	8.0	8.0
27	11.0	8.5	10.0	13.0	12.0	12.5	11.0	10.0	10.5	8.5	8.0	8.5
28	11.0	9.5	10.0	13.0	11.5	12.0	11.5	10.0	10.5	8.5	8.0	8.5
29	11.5	9.5	10.5	13.0	11.5	12.0	11.0	10.5	10.5	8.0	7.5	8.0
30	13.0	9.0	11.0	13.0	11.5	12.5	11.5	10.0	10.5	8.0	7.5	8.0
31	---	---	---	12.5	12.0	12.0	10.5	9.5	10.0	---	---	---
MONTH	13.0	5.0	7.9	16.5	8.0	11.0	17.0	9.5	12.5	11.5	7.5	9.2

15081497 STANEY CREEK NEAR KLAWOCK

LOCATION.--Lat 55°48'05", long 133°06'31", in SW¼ NW¼ sec. 14, T. 70 S., R. 80 E. (Craig D-4 quad), Hydrologic Unit 19010103, on Prince of Wales Island, in Tongass National Forest, on right bank, approximately 2.9 mi upstream from mouth, and 17 mi north of Klawock.

DRAINAGE AREA.--50.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1989 to current year. Equivalent daily discharge record collected at station No. 15081500 near Craig during water years 1964-81. Drainage area, 51.6 mi².

GAGE.--Water-stage recorder. Elevation of gage is 47 ft above sea level, by barometer.

REMARKS.--Records fair, except for discharges above 6,000 ft³/s, and estimated daily discharges, which are poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
*Sep 30	0230	*11100	*15.00	No other peak greater than base discharge			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	478	481	2040	647	864	376	219	286	338	51	31	1380
2	221	391	1990	1530	492	251	135	372	371	55	35	1390
3	277	1160	342	2920	589	240	99	1290	156	51	33	847
4	219	341	208	1030	246	223	162	489	129	76	29	500
5	281	267	1540	1730	144	151	208	237	118	116	26	708
6	1060	624	1010	949	107	177	154	141	171	314	24	523
7	875	607	246	493	94	433	124	309	164	278	25	188
8	496	357	143	1030	96	240	108	1090	138	220	23	177
9	483	209	102	448	91	176	121	412	128	296	20	114
10	275	157	e71	219	76	1520	105	211	178	168	18	86
11	680	137	e58	140	e70	3300	101	304	125	116	16	76
12	594	866	e55	101	e66	441	128	299	90	88	15	109
13	609	345	e48	100	e320	228	113	243	83	169	14	124
14	281	192	e42	98	480	144	91	182	151	175	13	86
15	1150	146	e36	264	142	132	95	185	148	126	12	69
16	589	150	e40	944	e82	154	102	238	128	98	12	62
17	293	1400	e60	470	e65	223	187	355	96	168	12	75
18	205	344	e360	406	e46	172	235	347	82	100	16	549
19	228	287	216	363	e44	232	217	348	77	71	43	1260
20	1270	226	105	221	e40	141	134	233	102	58	46	450
21	484	207	e80	610	e36	e69	123	203	197	50	474	266
22	1140	1730	e70	486	e34	e65	119	564	197	44	183	1350
23	876	2100	e60	642	e30	e55	556	256	155	44	103	608
24	407	1270	e60	570	e25	60	810	159	161	49	142	250
25	230	763	683	242	51	170	421	121	179	43	224	344
26	170	558	320	157	117	284	391	105	149	39	349	198
27	150	593	191	1190	2170	248	992	122	88	37	1610	282
28	201	403	187	821	682	325	338	113	75	34	284	196
29	150	199	325	260	---	329	320	115	66	33	140	1840
30	390	140	675	214	---	507	433	121	56	30	147	5200
31	904	---	374	2810	---	528	---	431	---	29	179	---
TOTAL	15666	16650	11737	22105	7299	11594	7341	9881	4296	3226	4298	19307
MEAN	505	555	379	713	261	374	245	319	143	104	139	644
MAX	1270	2100	2040	2920	2170	3300	992	1290	371	314	1610	5200
MIN	150	137	36	98	25	55	91	105	56	29	12	62
AC-FT	31070	33030	23280	43850	14480	23000	14560	19600	8520	6400	8530	38300
CFSM	9.99	11.0	7.48	14.1	5.15	7.39	4.84	6.30	2.83	2.06	2.74	12.7
IN.	11.52	12.24	8.63	16.25	5.37	8.52	5.40	7.26	3.16	2.37	3.16	14.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2001, BY WATER YEAR (WY)#

MEAN	688	581	622	464	407	359	319	230	121	97.6	184	448
MAX	1123	996	1270	782	983	565	559	558	252	200	384	783
(WY)	2000	1992	1992	1992	1991	1994	1997	1999	1999	1997	1998	1994
MIN	443	201	267	240	152	204	173	79.0	26.5	22.1	26.6	166
(WY)	1997	1997	1997	1998	1994	1998	1993	1998	1993	1993	1993	1995

See Period of Record
e Estimated

15081497 STANEY CREEK NEAR KLAWOCK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1990 - 2001#	
ANNUAL TOTAL	131906		133400			
ANNUAL MEAN	360		365		377	
HIGHEST ANNUAL MEAN					506	1992
LOWEST ANNUAL MEAN					283	1995
HIGHEST DAILY MEAN	3530	Aug 21	5200	Sep 30	14900	Oct 26 1993
LOWEST DAILY MEAN	25	Aug 14	a12	Aug 15	4.4	Jul 21 1993
ANNUAL SEVEN-DAY MINIMUM	31	Aug 8	13	Aug 11	6.0	Jul 15 1993
MAXIMUM PEAK FLOW			11100	Sep 30	b19800	Oct 26 1993
MAXIMUM PEAK STAGE			15.00	Sep 30	17.20	Oct 26 1993
INSTANTANEOUS LOW FLOW			11	Aug 17	4.0	Jul 21 1993
ANNUAL RUNOFF (AC-FT)	261600		264600		272800	
ANNUAL RUNOFF (CFSM)	7.12		7.22		7.44	
ANNUAL RUNOFF (INCHES)	96.97		98.07		101.12	
10 PERCENT EXCEEDS	880		887		902	
50 PERCENT EXCEEDS	191		196		173	
90 PERCENT EXCEEDS	61		44		37	

See Period of Record

a Aug. 15-17

b From rating curve extended above 3300 ft³/s

15081497 STANEY CREEK NEAR KLAWOCK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1990 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: January 1990 to current year.

INSTRUMENTATION.--Electronic water temperature recorder since January 11, 1990, set for 2-hour recording interval. As of April 9, 1996, recorder set to 15-minute recording interval.

REMARKS.--No record due to malfunctioning probe October 25-30, November 9-11, 14-16, 28-30, December 7 to January 1, 10-15, 29-30, February 4-11, 16-26, and March 17-24. Partial water temperature on November 12-13, January 28, February 12, March 16, and April 20. Records represent water temperature at sensor within 0.5°C.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE.--Maximum recorded, 26.0°C, June 29, 1990, but may have been higher during period of instrument malfunction July 9 to August 23, 1990; minimum, 0.0°C on many days during winter.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE.--Maximum, 19.5°C, August 13; minimum, 0.0°C on several days during the winter.

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

[illegible]

15081497 STANEY CREEK NEAR KLAWOOCK--Continued

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	4.0	3.0	3.5	2.0	1.0	1.5	3.5	1.5	2.5	7.5	5.0	6.0
2	4.0	3.5	3.5	2.5	1.5	2.0	4.0	1.5	2.5	6.0	5.0	5.5
3	3.5	2.5	3.0	2.5	1.5	2.0	4.0	1.5	3.0	6.0	4.5	5.0
4	---	---	---	3.0	1.5	2.0	4.0	2.5	3.0	6.5	4.5	5.5
5	---	---	---	2.5	1.0	2.0	4.0	2.0	3.0	6.5	4.5	5.5
6	---	---	---	3.0	2.0	2.5	5.0	2.0	3.5	6.0	4.0	5.0
7	---	---	---	3.0	2.0	2.5	4.5	2.0	3.5	6.0	5.0	5.5
8	---	---	---	3.0	1.5	2.5	3.5	2.0	3.0	5.0	4.5	4.5
9	---	---	---	3.0	2.0	2.5	5.0	2.0	3.5	6.5	4.0	5.0
10	---	---	---	3.0	2.5	2.5	5.5	2.5	4.0	7.5	5.0	6.0
11	---	---	---	3.0	2.5	3.0	4.0	3.0	3.5	7.0	5.5	6.5
12	.5	---	---	3.5	3.0	3.0	5.5	3.0	4.0	7.0	5.5	6.0
13	.5	.0	.0	3.5	2.0	3.0	5.0	2.5	4.0	8.0	5.0	6.5
14	1.5	.0	.5	3.5	1.0	2.5	7.5	3.5	5.0	8.0	6.0	7.0
15	2.0	1.0	1.5	4.0	2.5	3.5	7.0	3.0	5.0	8.0	6.0	7.0
16	---	---	---	3.5	---	---	6.0	3.5	5.0	7.5	5.5	6.5
17	---	---	---	---	---	---	5.5	4.5	5.0	7.5	5.0	6.5
18	---	---	---	---	---	---	6.0	3.5	5.0	6.5	5.5	6.0
19	---	---	---	---	---	---	6.5	3.5	5.0	8.0	5.0	6.5
20	---	---	---	---	---	---	7.0	---	---	6.0	5.0	5.5
21	---	---	---	---	---	---	7.5	3.5	5.5	8.5	5.5	7.0
22	---	---	---	---	---	---	7.0	4.5	5.5	9.0	6.5	7.5
23	---	---	---	---	---	---	6.0	4.0	5.0	8.5	6.0	7.0
24	---	---	---	---	---	---	5.0	3.5	4.5	8.0	6.0	7.0
25	---	---	---	3.5	1.5	2.5	6.0	4.0	5.0	10.5	5.5	7.5
26	---	---	---	2.5	1.5	2.0	6.0	4.5	5.5	8.5	6.0	7.5
27	1.0	.0	.5	3.5	1.5	2.0	6.0	4.5	5.0	9.5	6.5	7.5
28	1.0	.5	1.0	2.5	1.5	2.0	7.0	4.0	5.5	8.5	6.5	7.5
29	---	---	---	3.0	1.0	2.0	6.0	5.0	5.5	11.0	6.5	8.5
30	---	---	---	2.0	1.5	1.5	7.0	4.5	5.5	8.5	7.5	8.0
31	---	---	---	3.0	1.5	2.0	---	---	---	9.0	7.5	8.5
MONTH	---	---	---	---	---	---	7.5	---	---	11.0	4.0	6.5
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	9.0	7.5	8.0	13.5	10.5	12.0	14.5	12.0	13.0	10.5	10.5	10.5
2	9.0	7.0	8.0	13.0	10.0	11.5	16.0	12.0	14.0	10.5	10.0	10.0
3	9.0	7.0	8.0	12.5	10.5	11.5	17.0	11.5	14.5	10.5	9.5	10.0
4	9.5	7.0	8.0	12.0	10.5	11.0	16.0	13.5	14.0	11.0	9.5	10.5
5	9.5	7.0	8.0	11.5	9.5	10.5	16.0	11.5	14.0	10.5	9.5	10.0
6	10.5	8.0	9.0	11.0	9.5	10.5	16.0	13.0	15.0	10.5	9.5	10.0
7	11.0	8.0	9.5	11.5	10.0	10.5	17.5	12.0	15.0	10.5	9.0	10.0
8	11.0	8.0	9.0	10.5	9.5	10.0	18.5	13.0	16.0	10.5	9.0	10.0
9	9.0	8.0	8.5	11.0	10.0	10.5	18.5	13.0	16.0	10.5	9.0	10.0
10	10.0	8.0	9.0	11.0	9.0	10.0	18.5	13.5	16.0	10.5	8.0	9.5
11	10.0	8.0	9.0	10.5	9.0	10.0	18.0	14.0	16.0	10.0	8.5	9.0
12	10.0	7.5	9.0	10.5	9.5	9.5	18.5	13.0	16.0	10.5	9.0	9.5
13	12.0	8.0	9.5	11.0	9.5	10.0	19.5	14.0	17.0	11.5	9.5	10.5
14	11.0	8.5	9.5	10.5	9.5	10.0	17.0	15.0	16.0	12.0	9.5	10.5
15	11.5	9.0	10.0	13.0	9.0	11.0	18.5	14.5	16.0	12.0	10.0	10.5
16	9.5	8.0	9.0	12.5	10.0	10.5	18.0	14.5	16.5	12.5	10.5	11.0
17	10.0	8.0	9.0	12.5	10.0	11.5	17.0	15.0	16.0	12.0	10.5	11.0
18	13.5	8.5	10.5	15.0	10.0	12.5	16.0	13.0	14.5	11.5	10.5	11.0
19	14.0	9.5	11.5	17.0	10.5	14.0	15.5	14.0	14.5	10.5	10.0	10.0
20	12.5	10.0	11.0	18.5	11.5	15.0	15.0	12.5	13.5	10.5	9.5	10.0
21	11.5	10.0	10.5	19.0	12.5	16.0	13.0	12.0	12.0	10.5	9.5	10.0
22	12.0	9.0	10.5	17.5	13.5	14.5	12.5	11.0	12.0	10.0	10.0	10.0
23	10.5	9.0	9.5	14.5	12.0	12.5	13.0	11.0	12.0	10.0	9.0	9.5
24	12.0	8.5	10.0	14.0	11.0	12.5	13.5	10.5	12.0	9.5	9.0	9.5
25	11.5	9.0	10.5	14.0	11.5	13.0	13.0	11.0	12.0	10.0	9.0	9.5
26	14.0	9.0	11.0	14.5	11.0	13.0	12.0	10.5	11.5	9.0	8.0	8.5
27	12.5	9.0	11.0	14.5	12.0	13.5	12.0	11.5	11.5	9.5	8.5	9.0
28	13.5	10.0	11.5	14.5	12.0	13.0	12.0	10.0	10.5	10.0	9.0	9.0
29	11.5	10.0	11.0	15.5	12.0	14.0	12.0	9.5	10.5	9.0	8.5	9.0
30	16.0	9.0	12.0	14.5	12.0	13.0	11.5	9.5	10.5	9.0	8.0	8.5
31	---	---	---	14.0	12.5	13.0	11.5	9.5	10.5	---	---	---
MONTH	16.0	7.0	9.7	19.0	9.0	11.9	19.5	9.5	13.8	12.5	8.0	9.9

15081610 THREEMILE CREEK NEAR KLAWOCK

LOCATION.--Lat 53°32'06", long 132°57'17", in SW¹/₄ SW¹/₄ SE¹/₄ sec. 16, T. 73 S., R. 82 E. (Craig C-3 quad), Hydrologic Unit 19010103, on Prince of Wales Island, approximately 2.0 mi upstream from the mouth at Klawock Lake, and 5.2 mi east of the city of Klawock.

DRAINAGE AREA.--6.62 mi²

PERIOD OF RECORD.--March 1999 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 295 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records fair except for those above 250 ft³/s, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	51	173	67	85	31	26	51	138	43	24	179
2	36	57	132	156	88	26	21	66	108	45	24	158
3	66	114	67	155	70	25	19	136	75	50	20	175
4	44	61	54	93	43	20	34	68	81	65	18	143
5	42	56	120	142	34	16	23	40	91	82	17	138
6	55	63	97	87	28	22	20	29	98	102	17	96
7	100	66	56	104	28	47	22	79	102	151	16	60
8	64	46	43	85	26	23	19	105	104	115	15	57
9	51	36	33	60	23	19	21	43	102	112	15	38
10	41	30	28	39	21	136	18	36	85	84	14	26
11	78	28	25	31	18	240	18	50	61	55	13	23
12	72	60	23	27	18	72	19	58	51	51	12	24
13	73	38	20	27	68	36	16	56	78	68	12	20
14	73	31	16	24	37	24	16	54	101	133	11	17
15	117	27	15	37	19	28	16	55	95	80	11	15
16	72	30	16	66	15	32	20	56	78	72	10	14
17	48	80	22	72	14	42	47	83	72	63	9.9	17
18	47	45	71	66	13	28	51	89	65	45	10	43
19	58	45	31	49	13	26	36	103	92	40	12	83
20	90	55	21	48	12	19	27	55	133	42	36	54
21	67	49	19	61	12	14	29	63	115	41	101	66
22	91	143	17	69	12	13	38	142	87	37	41	172
23	68	112	17	74	11	12	128	81	84	38	42	88
24	51	106	27	58	9.9	15	90	53	81	48	52	64
25	40	82	71	44	10	77	56	45	67	33	50	56
26	33	68	41	36	27	44	141	49	52	25	98	39
27	33	65	32	104	164	38	139	60	55	23	215	37
28	38	43	35	66	58	29	67	63	65	22	72	38
29	29	33	41	41	---	28	87	65	52	22	47	221
30	54	51	78	38	---	76	66	93	42	20	38	200
31	62	---	50	139	---	47	---	190	---	19	98	---
TOTAL	1849	1771	1491	2165	976.9	1305	1330	2216	2510	1826	1170.9	2361
MEAN	59.6	59.0	48.1	69.8	34.9	42.1	44.3	71.5	83.7	58.9	37.8	78.7
MAX	117	143	173	156	164	240	141	190	138	151	215	221
MIN	29	27	15	24	9.9	12	16	29	42	19	9.9	14
AC-FT	3670	3510	2960	4290	1940	2590	2640	4400	4980	3620	2320	4680
CFSM	9.00	8.90	7.25	10.5	5.26	6.35	6.69	10.8	12.6	8.88	5.70	11.9
IN.	10.37	9.94	8.37	12.15	5.48	7.32	7.46	12.43	14.08	10.25	6.57	13.25

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY) #

	MEAN	86.2	63.5	52.7	52.9	30.8	32.7	43.5	72.2	85.7	62.3	50.4	76.4
MAX	113	68.1	57.3	69.8	34.9	42.1	50.1	88.8	108	68.3	58.6	92.9	
(WY)	2000	2000	2000	2001	2001	2001	1999	1999	1999	1999	2000	1999	
MIN	59.6	59.0	48.1	36.0	26.8	22.9	36.0	56.1	65.8	58.9	37.8	57.5	
(WY)	2001	2001	2001	2000	2000	1999	2000	2000	2000	2001	2001	2000	

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR			FOR 2001 WATER YEAR			WATER YEARS 1999 - 2001#		
ANNUAL TOTAL	18215.2			20971.8					
ANNUAL MEAN	49.8			57.5			56.6		
HIGHEST ANNUAL MEAN							57.5		
LOWEST ANNUAL MEAN							55.8		
HIGHEST DAILY MEAN	272	Aug	21	240	Mar	11	482	Oct	21 1999
LOWEST DAILY MEAN	7.3	Mar	9	a9.9	Feb	24	7.3	Mar	9 2000
ANNUAL SEVEN-DAY MINIMUM	9.2	Mar	6	11	Aug	12	9.1	Mar	4 1999
MAXIMUM PEAK FLOW				530	Sep	29	b1390	Aug	21 2000
MAXIMUM PEAK STAGE				c9.79	Jan	2	11.55	Aug	21 2000
INSTANTANEOUS LOW FLOW				9.1	Feb	24	6.4	Mar	10 2000
ANNUAL RUNOFF (AC-FT)	36130			41600			41020		
ANNUAL RUNOFF (CFSM)	7.51			8.67			8.54		
ANNUAL RUNOFF (INCHES)	102.20			117.67			116.03		
10 PERCENT EXCEEDS	79			110			104		
50 PERCENT EXCEEDS	47			49			52		
90 PERCENT EXCEEDS	16			17			17		

See Period of Record

a Feb. 24 and Aug. 17

b From rating curve extended above 130 ft³/s

c Result of backwater from log on control. Maximum stage after log was removed, 9.69 ft Sep. 29.

15081614 HALFMILE CREEK ABOVE DIVERSION NEAR KLAWOCK

LOCATION.--Lat 55°33'26", long 133°01'01", in NW¹/₄ SW¹/₄ NW¹/₄ sec. 7, T. 73 S., R. 82 E. (Craig C-3 quad), Hydrologic Unit 19010103, on Prince of Wales Island, approximately 1.1 mi upstream from the mouth at Klawock Lake, and 2.9 mi east of the city of Klawock.

DRAINAGE AREA.--4.73 mi².

PERIOD OF RECORD.--December 2000 to September 2001.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 400 ft above sea level, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR CURRENT YEAR:-- Maximum discharge during period December to September 597 ft³/s; September 29, gage height 10.07 ft. from rating curve extended above 53.8 ft³/s; minimum daily discharge about 5.0 ft³/s, Feb. 24-25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	e46	e70	26	17	31	e120	e37	7.9	158
2	---	---	---	e152	e75	17	12	46	e80	e38	8.2	96
3	---	---	---	e150	e55	18	12	100	e50	e41	7.7	135
4	---	---	---	e80	e40	15	27	39	e65	e48	7.4	105
5	---	---	---	e120	e28	12	20	17	e80	e55	7.1	94
6	---	---	---	e80	e20	14	16	12	e90	e80	6.9	59
7	---	---	e20	e100	e19	58	17	51	e95	e138	6.7	24
8	---	---	14	e70	e16	26	18	112	e100	e100	6.5	23
9	---	---	11	e48	e12	21	24	35	e75	e80	6.3	15
10	---	---	10	e34	e9.5	200	19	23	e60	e36	6.1	11
11	---	---	9.8	e25	e8.0	288	18	e36	e50	16	6.0	14
12	---	---	e9.3	e18	e7.0	61	21	e50	e36	21	5.9	18
13	---	---	e9.0	e13	e10	24	16	e48	e48	40	5.8	12
14	---	---	e8.5	e12	e8.0	14	15	e50	e97	65	e5.7	10
15	---	---	e8.0	e27	e7.0	16	18	e52	e85	24	e5.5	9.4
16	---	---	9.9	e60	e6.5	18	22	e55	e75	28	e5.3	8.9
17	---	---	11	e65	e6.3	33	53	e75	e65	24	e5.3	16
18	---	---	91	e50	e6.0	25	54	e85	e50	13	e5.3	68
19	---	---	28	e40	e5.9	22	38	e95	e70	10	e6.5	122
20	---	---	14	e38	e5.7	14	24	e40	e120	9.2	e25	45
21	---	---	11	e46	e5.5	13	20	e42	e100	8.5	e80	45
22	---	---	10	e55	e5.5	11	22	e120	e80	8.8	e34	157
23	---	---	8.8	e70	e5.3	9.2	113	e70	e70	13	e36	57
24	---	---	11	e50	e5.0	10	89	e44	e60	12	e44	26
25	---	---	80	e38	e5.0	58	50	e36	e50	10	e42	26
26	---	---	37	e30	36	37	112	e38	e36	9.0	e95	18
27	---	---	24	e95	221	27	95	e46	e46	8.5	e195	19
28	---	---	e26	e50	69	25	33	e55	e50	8.1	e100	25
29	---	---	e28	e30	---	20	46	e60	e40	7.8	e50	247
30	---	---	e65	e29	---	57	51	e110	e36	7.6	e19	201
31	---	---	e44	e120	---	38	---	e185	---	7.5	97	---
TOTAL	---	---	---	1841	767.2	1227.2	1092	1858	2079	1004.0	939.1	1864.3
MEAN	---	---	---	59.4	27.4	39.6	36.4	59.9	69.3	32.4	30.3	62.1
MAX	---	---	---	152	221	288	113	185	120	138	195	247
MIN	---	---	---	12	5.0	9.2	12	12	36	7.5	5.3	8.9
MED	---	---	---	50	8.8	22	22	50	68	21	7.4	26
AC-FT	---	---	---	3650	1520	2430	2170	3690	4120	1990	1860	3700
CFSM	---	---	---	12.6	5.79	8.37	7.70	12.7	14.7	6.85	6.40	13.1
IN.	---	---	---	14.48	6.03	9.65	8.59	14.61	16.35	7.90	7.39	14.66

e Estimated

15081995 REYNOLDS CREEK BELOW LAKE MELLEN NEAR HYDABURG

LOCATION.--Lat 55°13'05", long 132°34'50", in SW¹/₄ SE¹/₄ sec. 3, T. 77 S., R. 84 E. (Craig A-2 quad), Hydrologic Unit 19010103, on Prince of Wales Island, in Tongass National Forest, 0.1 mi below Lake Mellen, approximately 1 mi upstream from mouth at Copper Harbor in Hetta Inlet, and 10 mi east of Hydaburg.

DRAINAGE AREA.--5.20 mi².

PERIOD OF RECORD.--July 1982 to September 1985, October 1997 to current year

GAGE.--Water-stage recorder. Elevation of gage is 860 ft above sea level, from topographic map. Prior to January 1, 1984, at datum 2.00 ft higher.

REMARKS.--Records good, except for estimated daily discharges which are poor. GOES satellite telemetry at station. Streamflow affected by storage in lakes, which cover 30 percent of the basin.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	75	162	71	133	57	40	81	107	e54	e33	151
2	49	80	200	106	146	53	34	83	92	e51	e34	164
3	48	109	128	169	133	45	31	113	81	e50	e32	199
4	46	92	107	134	107	39	33	102	82	e60	e33	169
5	45	82	118	184	92	35	33	87	85	e83	e34	136
6	57	84	128	161	82	39	30	78	81	e90	e35	136
7	108	88	103	138	74	48	29	100	82	e95	e36	114
8	88	77	89	169	68	42	28	99	78	e100	e34	104
9	80	67	79	136	62	37	28	85	76	e102	e33	93
10	68	59	70	112	57	55	27	79	71	e95	e32	83
11	80	54	64	97	51	125	27	89	66	e90	e30	76
12	89	87	58	86	46	94	27	85	62	e85	e29	73
13	91	85	52	78	46	70	26	87	63	e75	e28	65
14	78	67	46	70	53	58	25	89	72	e84	e26	58
15	126	58	42	68	44	58	25	90	70	e77	e25	52
16	105	55	42	104	38	58	25	92	62	e74	e24	47
17	88	82	41	115	34	65	29	96	58	e70	e23	52
18	79	70	74	102	32	58	36	102	54	e65	e22	73
19	80	61	57	93	30	58	35	98	58	e60	e30	84
20	92	58	44	87	29	50	30	85	89	e56	e42	71
21	91	58	38	89	28	42	31	82	94	e54	e46	75
22	124	125	34	89	27	37	35	110	82	e50	e48	127
23	111	180	32	99	26	34	68	99	73	e48	e55	118
24	95	163	33	94	25	32	95	86	e70	e45	e70	98
25	82	150	68	81	25	46	75	78	e67	e43	e95	103
26	73	129	71	72	26	58	74	74	e65	e40	e120	85
27	69	122	67	95	68	52	100	73	e63	e38	e140	87
28	68	107	54	107	76	50	86	70	e60	e36	e98	91
29	61	91	51	86	---	43	98	67	e57	e34	80	121
30	68	86	75	77	---	46	93	68	e55	e33	75	170
31	87	---	78	107	---	51	---	122	---	e32	94	---
TOTAL	2484	2701	2305	3276	1658	1635	1353	2749	2175	1969	1536	3075
MEAN	80.1	90.0	74.4	106	59.2	52.7	45.1	88.7	72.5	63.5	49.5	102
MAX	126	180	200	184	146	125	100	122	107	102	140	199
MIN	45	54	32	68	25	32	25	67	54	32	22	47
AC-FT	4930	5360	4570	6500	3290	3240	2680	5450	4310	3910	3050	6100
CFSM	15.4	17.3	14.3	20.3	11.4	10.1	8.67	17.1	13.9	12.2	9.53	19.7
IN.	17.77	19.32	16.49	23.44	11.86	11.70	9.68	19.67	15.56	14.09	10.99	22.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2001, BY WATER YEAR (WY)#

	MEAN	95.9	75.6	70.5	90.4	74.2	61.5	66.4	81.3	65.8	46.5	49.3	64.2
MAX	172	142	131	129	107	97.9	90.9	128	103	63.5	78.7	102	
(WY)	2000	2000	1998	1985	1984	1984	2000	1999	1999	2001	1983	2001	
MIN	71.6	44.1	20.7	61.4	47.7	38.3	45.1	40.4	22.9	20.2	19.3	32.2	
(WY)	1986	1986	1984	1998	1999	1999	2001	1998	1998	1998	1982	1982	

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1982 - 2001#

ANNUAL TOTAL	27633	26916	
ANNUAL MEAN	75.5	73.7	71.5
HIGHEST ANNUAL MEAN			88.9
LOWEST ANNUAL MEAN			59.5
HIGHEST DAILY MEAN	250	Aug 22	610
LOWEST DAILY MEAN	29	Aug 14	9.0
ANNUAL SEVEN-DAY MINIMUM	33	Jan 20	25
MAXIMUM PEAK FLOW			225
MAXIMUM PEAK STAGE			6.70
INSTANTANEOUS LOW FLOW			a
ANNUAL RUNOFF (AC-FT)	54810	53390	51820
ANNUAL RUNOFF (CFSM)	14.5	14.2	13.8
ANNUAL RUNOFF (INCHES)	197.68	192.55	186.90
10 PERCENT EXCEEDS	118	118	120
50 PERCENT EXCEEDS	71	71	61
90 PERCENT EXCEEDS	38	32	29

See Period of Record; partial years used in monthly summary statistics and break in record

a Not determined; see lowest daily mean

b Jul. 9 and 10, 1998

e Estimated

15085100 OLD TOM CREEK NEAR KASAAN

LOCATION.--Lat 55°23'44", long 132°24'25", in NW¼ SW¼ sec. 6, T. 75 S., R. 86 E. (Craig B-2 quad) Hydrologic Unit 19010103, on Prince of Wales Island, in Tongass National Forest, on left bank 1,000 ft upstream from mouth at Skowl Arm of Kasaan Bay, 0.4 mi downstream from unnamed tributary, and 10 mi south of Kasaan.

DRAINAGE AREA.--5.90 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1949 to current year.

REVISED RECORDS.--WDR AK-85-1: 1950-1983 (P), 1984.

GAGE.--Water-stage recorder. Elevation of gage is 10 ft above sea level, from topographic map.

REMARKS.--Records fair except estimated daily discharges, which are poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Oct 15	0500	602	4.63	Jan 20	1630	499	4.30
Nov 23	0330	514	4.35	Feb 2	0430	529	4.40
Dec 1	1545	*951	*5.60	Aug 21	0730	548	4.46
Dec 18	0545	487	4.26	Aug 31	1915	799	5.20
Jan 2	2330	658	4.80	Sept 2	2200	631	4.72
Jan 4	2315	545	4.45	Sept 29	2145	605	4.64
Jan 7	2315	496	4.29				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	59	683	108	166	84	30	69	69	11	3.2	338
2	5.8	54	212	310	387	87	19	64	48	9.7	4.4	311
3	8.5	78	60	362	128	42	14	139	32	10	3.7	265
4	7.5	35	36	231	48	24	16	58	33	11	3.4	96
5	7.2	28	51	295	29	18	16	34	32	10	3.0	55
6	16	32	99	132	21	23	14	32	27	16	3.4	40
7	97	56	41	150	17	62	12	158	26	18	3.1	26
8	42	29	27	212	17	29	11	84	24	17	2.8	20
9	37	21	20	150	16	20	11	47	22	22	2.5	16
10	21	17	16	e55	13	56	9.9	39	19	16	2.2	13
11	31	15	13	e34	8.9	190	9.9	40	18	12	2.0	12
12	36	87	11	24	8.3	63	10	39	16	12	1.7	13
13	36	38	9.2	19	11	33	9.4	52	17	22	1.6	9.9
14	50	24	e8.0	15	18	23	9.6	81	20	17	1.4	7.9
15	291	19	e7.5	18	11	47	10	53	18	12	1.4	6.8
16	87	26	e7.0	52	8.9	43	12	51	17	13	1.2	6.1
17	42	93	10	153	e7.7	46	21	55	15	19	1.2	9.2
18	31	33	201	110	7.0	63	25	75	14	13	4.6	34
19	60	25	48	62	6.4	65	18	68	20	10	4.8	44
20	126	43	24	201	6.0	32	15	40	44	8.3	86	29
21	67	36	17	113	5.6	18	15	39	42	7.2	266	71
22	134	291	13	150	5.4	14	23	52	30	6.4	84	145
23	80	288	11	165	4.9	12	135	34	22	6.1	231	104
24	43	200	25	79	e4.4	11	109	26	44	5.7	108	75
25	27	150	132	45	4.4	133	56	22	38	5.0	109	67
26	21	96	62	30	6.2	71	108	20	23	4.5	103	70
27	21	77	44	217	151	54	117	24	18	4.1	187	95
28	37	45	31	100	82	44	70	21	17	3.8	52	147
29	22	29	59	40	---	30	208	21	15	3.6	35	414
30	91	65	158	32	---	73	108	27	13	3.2	37	268
31	110	---	71	203	---	66	---	146	---	2.9	229	---
TOTAL	1692.7	2089	2206.7	3867	1199.1	1576	1241.8	1710	793	331.5	1578.6	2807.9
MEAN	54.6	69.6	71.2	125	42.8	50.8	41.4	55.2	26.4	10.7	50.9	93.6
MAX	291	291	683	362	387	190	208	158	69	22	266	414
MIN	5.8	15	7.0	15	4.4	11	9.4	20	13	2.9	1.2	6.1
AC-FT	3360	4140	4380	7670	2380	3130	2460	3390	1570	658	3130	5570
CFSM	9.25	11.8	12.1	21.1	7.26	8.62	7.02	9.35	4.48	1.81	8.63	15.9
IN.	10.67	13.17	13.91	24.38	7.56	9.94	7.83	10.78	5.00	2.09	9.95	17.70

e Estimated

15085100 OLD TOM CREEK NEAR KASAAN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2001, BY WATER YEAR (WY)#

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	70.9	66.1	57.5	48.4	45.4	39.1	48.7	43.1	26.1	13.3	15.1	31.7
MAX	163	166	136	128	117	86.3	122	99.1	56.1	31.0	50.9	93.6
(WY)	1978	2000	1992	1992	1998	1984	1980	1999	1950	1991	2001	2001
MIN	28.4	17.1	8.29	3.00	5.00	10.1	19.1	15.0	5.45	2.66	1.81	2.69
(WY)	1952	1966	1984	1950	1950	1956	1967	1996	1958	1958	1993	1965

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1949 - 2001#

ANNUAL TOTAL	18221.0	21093.3	
ANNUAL MEAN	49.8	57.8	42.1
HIGHEST ANNUAL MEAN			63.1 2000
LOWEST ANNUAL MEAN			25.2 1951
HIGHEST DAILY MEAN	683 Dec 1	683 Dec 1	858 Oct 23 1990
LOWEST DAILY MEAN	3.9 Aug 14	a1.2 Aug 16	.28 Nov 14 1965
ANNUAL SEVEN-DAY MINIMUM	5.0 Aug 9	1.5 Aug 11	.55 Nov 13 1965
MAXIMUM PEAK FLOW		951 Dec 1	b1490 Apr 16 1952
MAXIMUM PEAK STAGE		5.60 Dec 1	6.96 Apr 16 1952
INSTANTANEOUS LOW FLOW		.73 Aug 18	.16 Nov 15 1965
ANNUAL RUNOFF (AC-FT)	36140	41840	30480
ANNUAL RUNOFF (CFSM)	8.44	9.79	7.13
ANNUAL RUNOFF (INCHES)	114.88	133.00	96.88
10 PERCENT EXCEEDS	120	150	93
50 PERCENT EXCEEDS	27	30	24
90 PERCENT EXCEEDS	9.0	6.2	6.5

See Period of Record; partial years used in monthly summary statistics

a Aug. 16 and 17

b From rating curve extended above 330 ft³/s

15085100 OLD TOM CREEK NEAR KASAAN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956, 1959, and 1965 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1964, April 1965 to February 1975, June 1975 to April 1978, and November 1978 to current year.

INSTRUMENTATION.--Electronic water-temperature recorder set for 15-minute recording interval since April 11, 1996.

REMARKS.--Records represent water-temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on August 28. No variation was found within the cross section. No variation was found between mean stream temperature and sensor temperature.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 18.5°C, July 3, 1998; minimum, 0.0°C, on many days during most winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 15.5°C, August 13; minimum, 0.0°C, on many days during the winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	STREAM WIDTH (FT) (00004)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)
AUG 2001							
28...	1108	39.1	1.50	2.30	48.7	11.5	13.0
28...	1107	39.1	11.50	2.30	48.7	11.5	13.0
28...	1106	39.1	21.50	2.30	48.7	11.5	13.0
28...	1105	39.1	31.50	2.30	48.7	11.5	13.0

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	8.5	7.0	8.0	6.5	6.0	6.0	5.0	4.5	5.0	3.5	3.0	3.0
2	7.0	6.0	6.5	7.0	6.5	6.5	5.5	5.0	5.0	4.0	3.0	3.5
3	8.0	7.0	7.5	7.5	6.5	7.0	5.0	4.5	4.5	4.0	3.5	4.0
4	8.5	7.5	8.0	6.5	5.5	6.0	4.5	4.0	4.5	3.5	3.0	3.5
5	9.0	8.0	8.5	6.5	5.5	6.0	5.5	4.5	5.0	4.0	3.5	4.0
6	9.0	8.5	8.5	6.0	5.5	6.0	5.5	4.0	5.0	3.5	3.5	3.5
7	9.0	8.5	9.0	6.0	5.5	6.0	4.0	3.5	4.0	4.0	3.0	3.5
8	8.5	8.0	8.0	6.0	5.0	5.5	3.5	3.0	3.5	4.0	3.5	3.5
9	8.5	7.5	8.0	5.0	4.0	4.5	3.0	1.5	2.0	3.5	3.0	3.5
10	8.0	7.0	7.5	4.5	4.0	4.0	1.5	1.5	1.5	3.0	2.5	2.5
11	8.5	8.0	8.0	5.0	4.0	4.5	1.5	1.0	1.5	2.5	1.5	2.0
12	9.5	8.5	9.0	5.5	5.0	5.0	1.0	1.0	1.0	2.0	1.5	2.0
13	9.0	8.0	8.5	5.0	5.0	5.0	1.0	.5	.5	2.5	2.0	2.0
14	8.5	7.5	8.0	5.0	4.5	4.5	.5	.0	.0	2.0	2.0	2.0
15	9.0	8.0	8.5	5.0	4.5	5.0	.0	.0	.0	2.5	2.0	2.5
16	8.5	7.5	8.0	5.5	5.0	5.0	.0	.0	.0	3.0	2.5	2.5
17	8.5	8.0	8.0	5.5	4.5	5.0	.5	.0	.5	3.5	2.5	3.0
18	8.5	7.5	8.0	5.0	4.5	4.5	2.5	.0	1.5	3.5	3.0	3.5
19	7.5	7.0	7.0	5.5	5.0	5.0	2.5	2.0	2.5	3.0	3.0	3.0
20	7.5	7.0	7.0	6.0	5.0	5.5	2.5	2.0	2.0	3.5	3.0	3.0
21	7.0	6.5	7.0	6.0	6.0	6.0	2.0	1.0	1.5	3.5	3.0	3.5
22	8.0	7.0	7.5	6.5	6.0	6.5	2.0	1.0	1.5	3.5	3.5	3.5
23	8.0	7.0	7.5	6.5	5.5	6.0	2.0	1.0	1.5	3.5	3.5	3.5
24	7.0	6.5	7.0	6.0	5.5	5.5	2.5	2.0	2.0	4.0	3.5	3.5
25	6.5	5.5	6.0	5.5	5.0	5.5	2.5	2.0	2.5	4.0	3.5	4.0
26	6.5	5.5	6.0	5.0	4.5	5.0	2.5	2.5	2.5	4.0	3.5	3.5
27	6.5	6.0	6.5	5.0	4.0	4.5	2.5	2.5	2.5	4.0	3.5	3.5
28	6.5	6.0	6.5	4.0	3.5	4.0	2.5	2.5	2.5	4.0	2.5	3.0
29	6.5	5.0	5.5	4.0	3.5	4.0	3.0	2.5	3.0	3.0	2.0	2.5
30	6.0	5.0	5.5	4.5	4.0	4.0	3.5	3.0	3.0	2.5	2.0	2.5
31	6.5	6.0	6.0	---	---	---	3.0	3.0	3.0	3.5	2.5	3.0
MONTH	9.5	5.0	7.4	7.5	3.5	5.2	5.5	.0	2.4	4.0	1.5	3.1

15085100 OLD TOM CREEK NEAR KASAAN--Continued

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	3.5	3.5	3.5	2.0	1.5	2.0	3.0	2.5	3.0	5.5	4.5	4.5
2	4.0	3.5	3.5	2.5	2.0	2.0	3.0	2.0	2.5	5.0	4.0	4.5
3	3.5	2.5	3.0	2.5	2.0	2.5	3.0	2.0	2.5	5.0	4.0	4.5
4	2.5	2.0	2.5	2.5	2.0	2.5	3.5	2.5	3.0	5.0	4.5	4.5
5	2.5	2.0	2.0	2.5	1.5	2.0	3.0	2.5	3.0	5.0	4.5	5.0
6	2.0	2.0	2.0	3.0	2.0	2.5	3.5	2.5	3.0	5.0	4.5	4.5
7	2.5	2.0	2.0	3.0	2.0	2.5	3.5	2.5	3.0	5.5	4.0	4.5
8	2.5	2.0	2.0	3.0	2.0	2.5	3.5	2.5	3.0	5.5	5.0	5.0
9	2.0	1.0	2.0	3.0	2.5	2.5	3.5	3.0	3.5	5.5	5.0	5.0
10	1.5	.5	1.5	3.0	2.5	2.5	3.5	3.0	3.0	5.5	5.0	5.0
11	.5	.0	.5	3.0	2.5	2.5	3.5	3.0	3.5	5.5	5.0	5.0
12	1.5	.5	1.0	3.5	3.0	3.0	4.0	3.5	3.5	5.5	5.0	5.0
13	1.5	1.0	1.5	3.0	2.5	3.0	3.5	3.0	3.5	5.0	4.5	5.0
14	1.5	1.0	1.0	3.0	2.0	2.5	4.5	3.5	4.0	5.5	5.0	5.0
15	1.0	.5	.5	3.5	2.5	3.0	4.0	3.0	3.5	5.0	5.0	5.0
16	.5	.0	.0	3.0	2.5	3.0	4.0	3.5	3.5	5.0	4.5	5.0
17	.5	.0	.0	3.5	2.5	3.0	4.0	3.5	4.0	5.5	4.5	5.0
18	1.0	.5	.5	3.5	2.5	3.0	4.5	3.5	3.5	5.0	5.0	5.0
19	2.0	.5	1.0	3.5	2.5	3.0	4.5	3.5	4.0	5.5	5.0	5.0
20	1.0	.5	1.0	3.0	1.5	2.5	5.5	3.5	4.0	5.5	5.0	5.0
21	1.5	.5	1.0	1.5	1.0	1.0	4.5	3.0	3.5	5.5	5.0	5.5
22	2.0	1.0	1.5	1.5	1.0	1.0	5.0	3.5	4.0	6.0	5.5	5.5
23	1.0	.0	.5	2.0	1.0	1.5	4.0	3.5	3.5	6.0	5.5	5.5
24	1.0	.0	.5	2.0	1.5	2.0	5.0	3.5	4.5	6.0	5.0	5.5
25	2.0	.5	1.0	2.0	1.5	2.0	5.5	4.0	4.5	6.0	5.5	5.5
26	2.0	1.5	1.5	3.0	2.0	2.5	5.0	4.5	4.5	6.0	5.5	6.0
27	2.0	1.0	1.5	3.0	2.5	2.5	4.5	4.0	4.5	6.0	5.5	6.0
28	2.0	.0	1.5	3.0	2.0	2.5	5.0	3.5	4.5	6.5	6.0	6.0
29	---	---	---	3.5	2.5	2.5	5.5	4.0	4.5	6.5	6.0	6.5
30	---	---	---	3.0	2.0	2.5	5.0	4.5	4.5	6.5	6.0	6.5
31	---	---	---	3.5	2.0	3.0	---	---	---	7.0	6.5	6.5
MONTH	4.0	.0	1.4	3.5	1.0	2.4	5.5	2.0	3.6	7.0	4.0	5.2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	6.5	6.5	6.5	10.5	10.0	10.0	11.5	11.0	11.5	11.0	10.5	10.5
2	6.5	6.0	6.5	10.5	10.0	10.5	13.0	11.0	11.5	10.5	9.5	10.5
3	7.0	6.5	6.5	10.5	10.5	10.5	11.5	10.5	11.0	11.0	10.0	10.5
4	7.0	6.5	7.0	10.5	10.5	10.5	11.5	11.0	11.0	11.0	10.0	10.5
5	7.5	6.5	7.0	10.5	10.0	10.0	12.0	11.0	11.5	11.0	10.5	10.5
6	7.5	7.0	7.0	10.0	10.0	10.0	12.0	11.0	11.5	11.0	10.0	10.5
7	7.5	7.0	7.5	10.0	9.5	10.0	13.0	11.0	12.0	11.0	10.0	10.5
8	7.5	7.5	7.5	10.0	9.5	9.5	13.5	11.0	12.0	11.0	10.0	10.5
9	7.5	7.5	7.5	9.5	9.5	9.5	14.5	11.0	12.5	11.0	9.5	10.0
10	7.5	7.5	7.5	9.5	9.5	9.5	14.5	11.5	13.0	10.5	8.5	9.5
11	7.5	7.5	7.5	9.5	9.5	9.5	14.5	12.0	13.0	10.0	9.5	9.5
12	8.0	7.5	8.0	9.5	9.5	9.5	15.0	12.0	13.0	10.5	9.5	10.0
13	8.0	8.0	8.0	9.5	9.5	9.5	15.5	12.0	13.0	11.0	10.0	10.5
14	8.0	8.0	8.0	10.5	9.5	10.0	15.0	12.5	13.5	11.0	9.5	10.0
15	8.5	8.0	8.0	11.0	9.5	10.0	15.5	12.5	13.5	11.5	10.0	10.5
16	8.5	8.0	8.5	11.0	10.0	10.5	13.5	12.5	13.0	11.5	10.0	10.5
17	8.5	8.0	8.5	11.0	10.0	10.5	13.5	12.5	13.0	11.0	10.5	10.5
18	9.0	8.5	8.5	12.0	10.5	11.0	13.0	12.0	12.5	10.5	10.0	10.5
19	9.0	9.0	9.0	13.0	11.0	12.0	12.5	12.0	12.0	11.0	10.0	10.5
20	9.5	9.0	9.0	14.0	11.5	12.5	12.0	11.0	11.5	11.0	10.0	10.5
21	9.5	9.0	9.0	14.0	12.0	13.0	12.5	10.5	11.5	10.5	10.0	10.0
22	9.0	9.0	9.0	13.0	12.5	13.0	12.5	11.0	12.0	10.5	10.0	10.0
23	9.0	9.0	9.0	12.5	11.5	12.0	11.5	11.0	11.0	10.5	10.0	10.0
24	9.0	9.0	9.0	12.5	11.0	11.5	11.5	11.5	11.5	10.5	9.5	10.0
25	9.0	9.0	9.0	13.0	11.5	12.0	11.5	11.0	11.5	10.0	9.5	9.5
26	9.5	9.0	9.5	12.5	11.0	11.5	11.5	11.0	11.0	10.0	9.0	9.5
27	10.0	9.5	9.5	12.0	11.5	11.5	12.0	11.0	11.5	9.5	9.0	9.0
28	10.0	10.0	10.0	12.0	11.5	12.0	12.0	11.0	11.5	9.5	9.0	9.0
29	10.0	10.0	10.0	12.0	11.0	11.5	11.5	11.0	11.5	9.5	8.5	9.0
30	10.5	9.5	10.0	12.5	10.0	11.0	12.0	11.0	11.5	10.0	8.5	9.0
31	---	---	---	11.5	11.5	11.5	11.5	10.0	11.0	---	---	---
MONTH	10.5	6.0	8.2	14.0	9.5	10.8	15.5	10.0	12.0	11.5	8.5	10.1

15086960 SUNRISE LAKE OUTLET NEAR WRANGELL

LOCATION.--Lat 56°24'44", long 132°29'30", in NE¹/₄ NW¹/₄ sec. 17, T. 63 S., R. 83 E. (Petersburg B-2 quad), Hydrologic Unit 19010202, on Woronkofski Island, in the Tongass National Forest, on the right bank, 75 ft downstream from Sunrise Lake outlet and 6.5 mi southwest of Wrangell.

DRAINAGE AREA.--1.17 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1977 to September 1980, October 1997 to current year. Prior to October 1997 at a site 350 ft upstream at different datum (discontinued).

REVISED RECORDS.--WDR-AK-99-1: 1977-80 and 1998.

GAGE.--Water-stage recorder. Elevation of gage is 1950 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period October to August, 106 ft³/s, January 3, 2001, gage height 9.24 ft; minimum daily discharge during period October to August, 1.0 ft³/s, February 25, 2001.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e11	5.7	13	4.8	14	3.4	2.9	4.8	41	14	e5.4	---
2	e7.0	13	32	12	11	2.6	2.2	e5.0	22	15	e5.7	---
3	e6.5	40	19	76	9.1	2.1	1.8	e5.5	20	16	e5.0	---
4	e5.5	18	12	24	5.5	1.9	1.9	e5.7	23	35	e4.4	---
5	e9.0	9.8	35	15	3.9	1.6	2.3	e6.0	23	27	e4.1	---
6	e13	13	45	15	3.1	1.9	2.0	5.6	22	43	e3.8	---
7	e14	15	18	8.5	2.7	2.0	1.6	4.6	22	47	e3.3	---
8	e15	13	11	7.2	2.4	1.7	1.4	4.4	21	31	e3.0	---
9	e11	8.1	8.2	5.8	e2.3	2.0	1.4	3.8	23	35	---	---
10	e7.5	5.4	6.4	4.3	2.1	2.8	1.3	3.4	25	23	---	---
11	e12	e5.2	5.2	3.3	1.9	4.9	1.2	4.8	17	15	---	---
12	e17	e7.8	4.4	e2.7	1.7	5.6	1.3	6.1	17	15	---	---
13	e28	6.0	3.6	e3.3	2.3	4.1	1.3	7.4	e23	42	---	---
14	e14	4.4	3.1	e2.9	3.6	2.9	1.1	7.1	24	31	---	---
15	e18	3.6	e2.8	e2.3	2.9	2.5	1.1	12	20	17	---	---
16	e13	4.1	e3.4	e3.0	2.3	2.6	1.1	11	17	13	---	---
17	e9.5	7.9	e3.6	e6.7	1.9	3.0	1.4	10	16	14	---	---
18	11	6.3	e3.8	e5.7	1.6	2.6	2.7	8.6	17	11	---	---
19	e12	8.3	e4.6	5.0	1.5	2.7	3.7	6.7	23	9.9	---	---
20	e13	11	e3.2	3.5	1.4	2.2	e3.8	6.6	e47	11	---	---
21	15	18	e2.5	e3.1	1.3	1.8	e3.6	11	36	11	---	---
22	30	51	e1.9	e2.5	1.2	1.5	e3.8	e27	24	9.8	---	---
23	22	41	e1.7	5.2	1.2	1.4	e5.7	e23	21	7.8	---	---
24	13	25	e1.6	8.3	1.1	1.2	e6.1	13	19	6.4	---	---
25	7.9	18	e2.4	7.1	e1.0	1.4	e5.4	9.9	16	5.5	---	---
26	5.6	13	e2.9	4.8	e1.3	e2.8	5.2	10	14	4.8	---	---
27	4.4	9.8	e2.7	e5.8	3.8	3.6	e12	12	17	4.4	---	---
28	3.5	6.9	e2.4	e7.0	7.3	3.3	11	15	24	4.0	---	---
29	3.0	5.2	e2.7	e5.5	---	2.9	7.2	20	19	3.7	---	---
30	4.1	4.5	e4.4	e5.0	---	2.4	5.9	21	14	3.3	---	---
31	5.5	---	6.1	e6.2	---	3.3	---	47	---	e4.1	---	---
TOTAL	361.0	398.0	268.6	271.5	95.4	80.7	103.4	338.0	667	529.7	---	---
MEAN	11.6	13.3	8.66	8.76	3.41	2.60	3.45	10.9	22.2	17.1	---	---
MAX	30	51	45	76	14	5.6	12	47	47	47	---	---
MIN	3.0	3.6	1.6	2.3	1.0	1.2	1.1	3.4	14	3.3	---	---
AC-FT	716	789	533	539	189	160	205	670	1320	1050	---	---
CFSM	9.95	11.3	7.41	7.49	2.91	2.22	2.95	9.32	19.0	14.6	---	---
IN.	11.48	12.65	8.54	8.63	3.03	2.57	3.29	10.75	21.21	16.84	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2001, BY WATER YEAR (WY)#

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	17.7	8.97	8.52	5.97	3.48	3.79	6.66	17.4	20.9	14.9	10.1	11.6													
MAX	24.8	13.3	15.0	9.55	6.86	6.59	9.81	19.9	31.6	26.7	15.2	17.5													
(WY)	2000	2001	2000	1999	1980	1980	1980	1978	1998	2000	2000	1999													
MIN	11.6	4.24	4.20	2.26	1.60	2.44	3.45	10.9	9.88	5.91	3.47	7.04													
(WY)	2001	1999	1999	1979	1979	1978	2001	2001	1998	1998	1979	1977													

See period of record
e Estimated

15086960 SUNRISE LAKE OUTLET NEAR WRANGELL--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		WATER YEARS 1977 - 2001#	
ANNUAL TOTAL	4613.8			
ANNUAL MEAN	12.6		11.1	
HIGHEST ANNUAL MEAN			14.2	2000
LOWEST ANNUAL MEAN			8.66	1978
HIGHEST DAILY MEAN	110	Aug 22	110	Aug 22 2000
LOWEST DAILY MEAN	a1.2	Mar 9	b.93	Feb 24 1979
ANNUAL SEVEN-DAY MINIMUM	1.3	Mar 7	.94	Feb 23 1979
MAXIMUM PEAK FLOW			c205	Aug 21 2000
MAXIMUM PEAK STAGE			9.83	Aug 21 2000
INSTANTANEOUS LOW FLOW			.93	Feb 23 1979
ANNUAL RUNOFF (AC-FT)	9150		8010	
ANNUAL RUNOFF (CFSM)	10.8		9.45	
ANNUAL RUNOFF (INCHES)	146.70		128.43	
10 PERCENT EXCEEDS	28		25	
50 PERCENT EXCEEDS	8.0		7.3	
90 PERCENT EXCEEDS	2.0		2.1	

See Period of Record

a Mar. 9 to Mar. 12

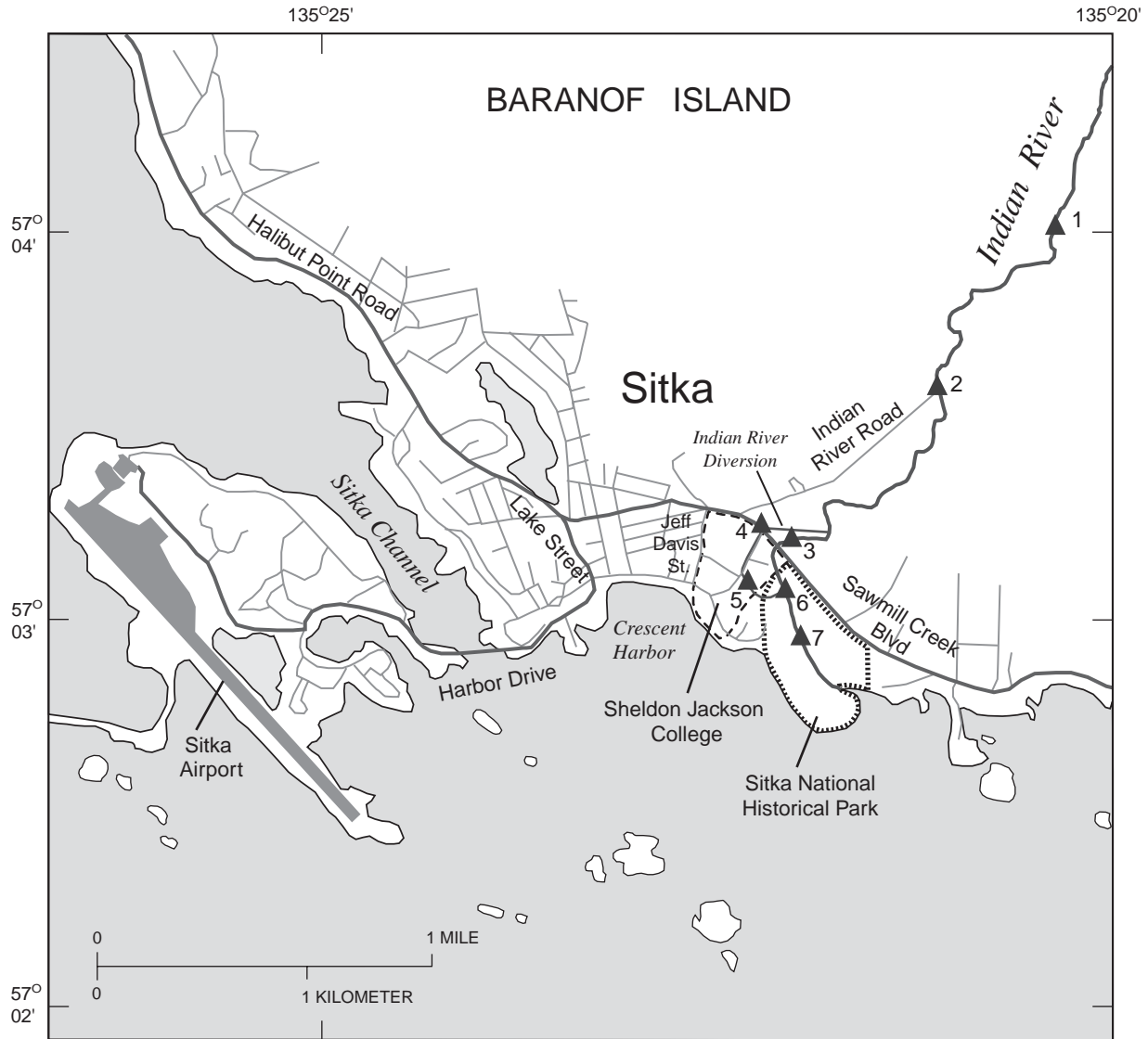
b Feb. 24 to Feb. 28

c From rating curve extended above 50 ft³/s

WATER-QUALITY RECORDS

WATER TEMPERATURE: Maximum recorded for October, 8.0°C, October 1-3; minimum recorded, 6.0°C, October 10-11, 14-16.

DAY	MAX	MIN	MEAN		MAX	MIN	MEAN		MAX	MIN	MEAN		MAX	MIN	MEAN
	OCTOBER				NOVEMBER				DECEMBER				JANUARY		
1	8.0	7.5	8.0		---	---	---		---	---	---		---	---	---
2	8.0	7.0	8.0		---	---	---		---	---	---		---	---	---
3	8.0	6.5	8.0		---	---	---		---	---	---		---	---	---
4	7.5	7.0	7.5		---	---	---		---	---	---		---	---	---
5	7.0	7.0	7.0		---	---	---		---	---	---		---	---	---
6	7.0	7.0	7.0		---	---	---		---	---	---		---	---	---
7	7.0	7.0	7.0		---	---	---		---	---	---		---	---	---
8	7.0	6.5	7.0		---	---	---		---	---	---		---	---	---
9	7.0	6.5	7.0		---	---	---		---	---	---		---	---	---
10	7.0	6.0	7.0		---	---	---		---	---	---		---	---	---
11	6.5	6.0	6.5		---	---	---		---	---	---		---	---	---
12	6.5	6.5	6.5		---	---	---		---	---	---		---	---	---
13	7.0	6.5	7.0		---	---	---		---	---	---		---	---	---
14	6.5	6.0	6.5		---	---	---		---	---	---		---	---	---
15	6.5	6.0	6.5		---	---	---		---	---	---		---	---	---
16	6.0	6.0	6.0		---	---	---		---	---	---		---	---	---
17	6.5	6.0	6.0		---	---	---		---	---	---		---	---	---
18	---	---	---		---	---	---		---	---	---		---	---	---
19	---	---	---		---	---	---		---	---	---		---	---	---
20	---	---	---		---	---	---		---	---	---		---	---	---
21	---	---	---		---	---	---		---	---	---		---	---	---
22	---	---	---		---	---	---		---	---	---		---	---	---
23	---	---	---		---	---	---		---	---	---		---	---	---
24	---	---	---		---	---	---		---	---	---		---	---	---
25	---	---	---		---	---	---		---	---	---		---	---	---
26	---	---	---		---	---	---		---	---	---		---	---	---
27	---	---	---		---	---	---		---	---	---		---	---	---
28	---	---	---		---	---	---		---	---	---		---	---	---
29	---	---	---		---	---	---		---	---	---		---	---	---
30	---	---	---		---	---	---		---	---	---		---	---	---
31	---	---	---		---	---	---		---	---	---		---	---	---
MONTH	---	---	---		---	---	---		---	---	---		---	---	---



EXPLANATION

▲¹ Discharge site and map number

Map No.	Station No.	Station Name	Map No.	Station No.	Station Name
* 1	15087690	Indian River near Sitka	5	15087735	Indian River Diversion Return Flow from Sheldon Jackson College at Sitka
2	15087695	Indian River above CBS pumphouse near Sitka	6	15087740	Indian River Diversion Return Flow at Mouth at Sitka
* 3	15087700	Indian River at Sitka	7	15087750	Indian River at Mouth at Sitka
4	15087730	Indian River Diversion to Sheldon Jackson College at Sawmill Cr Rd at Sitka			

* Daily discharge site

Locations of gaging stations in the Sitka area.

15087690 INDIAN RIVER NEAR SITKA

LOCATION.--Lat 57°04'01", long 135°17'42", in SW¹/₄ SE¹/₄ sec. 30, T. 55 S., R. 64 E. (Sitka A-4 quad), Hydrologic Unit 19010203, in Tongass National Forest, on Baranof Island, on right bank 2 mi upstream from mouth, and 1 mi northeast of Sitka.

DRAINAGE AREA.--10.1 mi²

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1980 to September 1993. October 1998 to current year.

REVISED RECORD.--WDR-82-1: 1980-81.

GAGE.--Water-stage recorder. Elevation of gage is 125 ft above sea level, from topographic map. Prior to October 1998, at site 200 ft upstream and at different datum

REMARKS.-- Records fair except for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of November 19, 1993, reached a stage of 14.04 ft, site and datum then in use, from recorder, discharge, 6,460 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1200 ft³/s and maximum(*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct 11	0200	*3080	*12.78	Dec 5	0615	1670	11.71

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	73	71	37	e149	e70	e35	58	124	57	72	46
2	42	62	71	58	e97	e56	e29	79	99	56	56	104
3	56	250	61	131	e113	e47	e30	130	100	60	58	71
4	43	111	75	82	e77	e44	e72	96	105	63	56	42
5	54	83	648	101	e62	e45	e57	72	98	107	45	193
6	134	74	170	89	e56	e47	39	65	92	86	36	125
7	136	92	108	70	e59	e53	35	77	94	159	32	106
8	121	76	92	73	e52	e59	51	132	103	100	31	90
9	206	62	80	67	e48	e75	54	97	102	85	32	79
10	184	55	72	56	e40	e412	42	83	110	85	32	74
11	757	119	65	51	e38	e500	44	79	87	81	29	80
12	247	113	59	47	e36	e221	40	82	85	82	28	159
13	216	74	52	52	e190	e131	38	80	90	81	25	407
14	171	61	46	50	e120	e100	35	e80	87	80	22	369
15	213	66	42	55	e65	e88	36	e80	82	80	25	160
16	139	62	39	67	e51	e80	41	79	81	81	24	152
17	106	104	38	56	e48	e77	53	71	81	73	21	159
18	91	68	45	e51	e43	e73	55	73	84	63	20	137
19	85	68	42	e48	e40	e66	47	63	99	62	21	128
20	84	72	35	e44	e38	e57	49	69	92	63	33	117
21	84	155	32	e54	e37	e52	53	79	80	64	17	110
22	101	194	29	e65	e35	e47	58	100	72	60	15	92
23	113	178	28	e76	e33	e43	58	109	76	69	12	79
24	93	138	28	e57	e32	e41	71	84	74	108	12	76
25	77	115	32	e47	e31	e43	57	79	66	89	14	61
26	67	119	32	e43	e80	e47	61	85	68	81	19	55
27	60	126	28	e122	e178	e41	65	97	77	70	72	56
28	55	91	27	e110	e138	e43	62	101	71	64	36	52
29	49	76	26	e62	---	e39	61	98	61	69	29	72
30	52	67	34	e80	---	e41	52	102	59	75	27	328
31	101	---	39	e160	---	e48	---	153	---	70	39	---
TOTAL	3987	3004	2246	2161	1986	2786	1480	2732	2599	2423	990	3779
MEAN	129	100	72.5	69.7	70.9	89.9	49.3	88.1	86.6	78.2	31.9	126
MAX	757	250	648	160	190	500	72	153	124	159	72	407
MIN	42	55	26	37	31	39	29	58	59	56	12	42
AC-FT	7910	5960	4450	4290	3940	5530	2940	5420	5160	4810	1960	7500
CFSM	12.7	9.91	7.17	6.90	7.02	8.90	4.88	8.73	8.58	7.74	3.16	12.5
IN.	14.68	11.06	8.27	7.96	7.31	10.26	5.45	10.06	9.57	8.92	3.65	13.92

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2001, BY WATER YEAR (WY)#

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
MEAN	190	103	104	101	81.6	64.2	69.4	108	90.7	64.1	86.3	174
MAX	293	218	207	184	154	122	111	167	166	111	238	295
(WY)	1988	1990	1990	1984	1993	1986	1983	1983	1985	1985	1983	1991
MIN	104	37.0	21.7	46.3	24.8	19.9	39.1	53.3	28.8	20.6	30.0	52.8
(WY)	1985	1999	1984	1988	1999	1989	1981	1981	1993	1993	1989	1986

See period of record; partial years used in monthly summary statistics and break in record
e Estimated

15087690 INDIAN RIVER NEAR SITKA--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR			FOR 2001 WATER YEAR		WATER YEARS 1980 - 2001#	
ANNUAL TOTAL	33073			30173			
ANNUAL MEAN	90.4			82.7		103	
HIGHEST ANNUAL MEAN						123	
LOWEST ANNUAL MEAN						82.7	
HIGHEST DAILY MEAN	1150	Sep	4	757	Oct	11	2000
LOWEST DAILY MEAN	20	Mar	9	a12	Aug	23	8.6
ANNUAL SEVEN-DAY MINIMUM	21	Mar	7	17	Aug	20	10
MAXIMUM PEAK FLOW				b3080	Oct	11	c5710
MAXIMUM PEAK STAGE				12.78	Oct	11	d13.51
INSTANTANEOUS LOW FLOW				11	Aug	24	8.2
ANNUAL RUNOFF (AC-FT)	65600			59850		74860	
ANNUAL RUNOFF (CFSM)	8.95			8.18		10.2	
ANNUAL RUNOFF (INCHES)	121.81			111.13		139.00	
10 PERCENT EXCEEDS	157			133		190	
50 PERCENT EXCEEDS	74			69		69	
90 PERCENT EXCEEDS	31			34		29	

See period of record; partial years used in monthly summary statistics and break in record

a Aug. 23 and 24

b From rating curve extended above 300 ft³/s

c From rating curve extended above 3,100 ft³/s, at site and datum then in use

d At site and datum then in use

15087690 INDIAN RIVER NEAR SITKA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- Water years 1983, January 2001 to September 2001.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 2001 to September 2001

WATER TEMPERATURE: May 2001 to September 2001.

INSTRUMENTATION.--Electronic water temperature recorder since May 16, 2001, recorder set to 1 hour recording interval.

REMARKS.--

SPECIFIC CONDUCTANCE: Probe installed May 16, no record May 16 to July 24, due to program error. Records represent specific conductance at sensor within 3 us/cm. No variation was found within the cross sections measured on April 4 and July 25. No variation was found between the mean stream specific conductance and specific conductance at the sensor.

WATER TEMPERATURE: Probe installed on May 16. Records represent water temperature at sensor within 0.5°C. No variation was found within the cross sections measured on April 4 and July 25. No variation was found between the mean stream temperature and temperature at the sensor.

EXTREMES OUTSIDE PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Minimum recorded, A specific conductance value of 21 us/cm was measured on October 12, 1982.

WATER TEMPERATURE: Minimum recorded, A water temperature of 2.5°C was measured on April 4, 2001.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 54 us/cm, August 20, and 23-25; minimum recorded, 27 us/cm, September 5.

WATER TEMPERATURE: Maximum recorded, 10.0°C, August 27, 2001, minimum recorded, 4.5°C several days in May and June.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

		SAMPLE LOC- ATION, CROSS SECTION (FT FM R BK) (72103)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)						
APR														
04...	0945	15.0	40	7.2	2.5	750	14.1	105						
04...	0946	20.0	40	7.2	2.5	750	14.1	105						
04...	0947	25.0	40	7.2	2.5	750	14.1	105						
04...	0948	30.0	40	7.2	2.5	750	14.1	105						
04...	0949	35.0	40	7.2	2.5	750	14.1	105						
04...	0950	40.0	40	7.2	2.5	750	14.1	105						
JUL														
25...	0902	5.0	39	6.6	7.5	763	12.5	104						
25...	0903	9.0	39	6.6	7.5	763	12.6	105						
25...	0904	13.0	39	6.6	7.5	763	12.7	106						
25...	0905	17.0	39	6.6	7.5	763	12.7	106						
25...	0906	21.0	40	6.7	7.5	763	12.7	106						
25...	0907	24.0	40	6.7	7.5	763	12.7	106						
25...	0908	28.0	39	6.7	7.5	763	12.8	107						
25...	0909	32.0	39	6.7	7.5	763	12.8	107						
DATE	TIME	MEDIUM CODE	SAMPLE TYPE	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM- PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	
JAN														
04...	1020	9	9	8.24	86	10	3045	42	7.4	--	--	14	4.75	
APR														
04...	0930	9	9	8.15	65	10	3045	40	7.2	2.5	14.1	15	4.93	
MAY														
16...	0900	9	9	8.24	78	10	3045	42	7.7	5.0	12.4	17	5.80	
16...	1130	9	9	--	--	--	8010	--	--	--	--	--	--	
16...	1200	H	9	--	--	--	--	--	--	--	--	--	--	
JUL														
25...	0930	9	9	8.38	88	10	3045	40	6.6	7.5	12.7	15	5.07	
DATE	TIME	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ANC WATER UNFLTRD FET FIELD (MG/L AS CACO3) (00410)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
JAN														
04...	.505	1.8	--	<.24	--	--	--	1.4	3.6	<.2	2.8	30	--	<.001
APR														
04...	.540	2.1	--	<.09	14	11	--	1.6	3.9	<.2	3.0	29	--	.002
MAY														
16...	.571	2.0	15	.12	18	14	--	1.4	3.8	<.2	3.2	28	26	<.001
16...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL														
25...	.513	1.7	--	.10	18	15	--	1.6	2.3	<.2	3.1	--	24	<.001

15087690 INDIAN RIVER NEAR SITKA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	H-2 / H-1 STABLE ISOTOPE RATIO PER MIL (82082)	O-16 / O-16 STABLE ISOTOPE RATIO PER MIL (82085)	CARBON, INOR- GANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC. TOTAL (MG/L AS C) (00688)
JAN 04...	.132	<.002	<.08	<.10	.009	E.004	<.007	10	<3.2	--	--	1.4	<.1
APR 04...	.076	.003	<.08	<.10	E.002	<.006	<.007	30	E2.9	--	--	1.8	<.1
MAY 16...	.102	<.002	<.08	<.10	<.004	<.006	<.007	10	<3.0	--	--	.50	<.1
16...	--	--	--	--	--	--	--	--	--	-79.30	-11.09	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 25...	.055	.002	<.08	<.10	E.003	E.003	<.007	40	E1.9	--	--	3.2	<.1

[illegible][illegible][illegible][illegible]

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	CARBON, ORG + INORG, SED, BM WS, <63U DW, REC PERCENT (49267)	CARBON, ORG + INORG, SED, BM WS, <2MM DW, REC (G/KG) (49272)	CARBON, INORG, SED, BM WS, <2MM DW, REC (G/KG) (49270)	CARBON, ORGANIC SED, BM WS, <2MM DW, REC (G/KG) (49271)	BENZENE 124TRI- CHLORO- SED, BM WS, <2MM DW, REC (UG/KG) (49438)	BENZENE O-DI- CHLORO- SED, BM WS, <2MM DW, REC (UG/KG) (49439)	NAPTHAL ENE, 12 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49403)	BENZENE M-DI- CHLORO- SED, BM WS, <2MM DW, REC (UG/KG) (49441)	BENZENE P-DI- CHLORO- SED, BM WS, <2MM DW, REC (UG/KG) (49442)	NAPTHAL ENE, 16 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49404)	9H-FLU- ORENE, 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49398)	PHENAN THRENE 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49410)	PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388)
	JAN 04...	--	--	--	--	--	--	--	--	--	--	--	--
APR 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 16...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	3.9	3.8	<.2	3.7	<50	<50	<50	<50	<50	<50	<50	<50	<50
JUL 25...	--	--	--	--	--	--	--	--	--	--	--	--	--
DATE	2,2'-BI QUINO- LINE, SED, BM WS, <2MM DW, REC (UG/KG) (49391)	NAPTHAL ENE, 236 TRIMETH SED, BM WS, <2MM DW, REC (UG/KG) (49405)	TOLUENE 2,4-DI- NITRO- SED, BM WS, <2MM DW, REC (UG/KG) (49395)	NAPTHAL ENE, 26 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49406)	TOLUENE 2,6-DI- NITRO- SED, BM WS, <2MM DW, REC (UG/KG) (49396)	NAPTHAL ENE, 2- CHLORO- SED, BM WS, <2MM DW, REC (UG/KG) (49407)	PHENOL, 2CHLORO BED MAT WS <2MM REC (UG/KG) (49467)	NAPTHAL ENE, 2- METHYL- SED BM WS <2MM DW REC (UG/KG) (49948)	ANTHRA- CENE, 2- METHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49435)	3,5- XYLENOL SED, BM WS, <2MM DW, REC (UG/KG) (49421)	4-BROMO PHNPNHL ETHER SED, BM WS, <2MM DW, REC (UG/KG) (49454)	M-CRE- SOL, 4- CHLORO- SED, BM WS, <2MM DW, REC (UG/KG) (49422)	4CHLORO PHNPNH LETPH SED, BM WS, <2MM DW, REC (UG/KG) (49455)
	JAN 04...	--	--	--	--	--	--	--	--	--	--	--	--
APR 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 16...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
JUL 25...	--	--	--	--	--	--	--	--	--	--	--	--	--
DATE	4HCYPEN PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49411)	ACENAPH THENE SED, BM WS, <2MM DW, REC (UG/KG) (49429)	ACENAPH THYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49428)	ACRI- DINE SED, BM WS, <2MM DW, REC (UG/KG) (49430)	ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49434)	ANTHRA- QUINONE SED, BM WS, <2MM DW, REC (UG/KG) (49437)	AZO- BENZENE SED, BM WS, <2MM DW, REC (UG/KG) (49443)	BENZ(A) ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49436)	BENZO (A) PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389)	BENZOB FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49458)	BENZOC1 NNOLINE BED MAT WS <2MM DRY WGT REC (UG/KG) (49468)	BENZO(G HI)PERY LENE SED, BM WS, <2MM DW, REC (UG/KG) (49408)	BENZO K FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397)
	JAN 04...	--	--	--	--	--	--	--	--	--	--	--	--
APR 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 16...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
JUL 25...	--	--	--	--	--	--	--	--	--	--	--	--	--
DATE	PHTHALA TE,BIS2 ETHHEXL SED, BM WS, <2MM DW, REC (UG/KG) (49426)	PHTHALA TEBUTYL BENZYL- SED, BM WS, <2MM DW, REC (UG/KG) (49427)	PHENOL C8- ALKYL- SED, BM WS, <2MM DW, REC (UG/KG) (49424)	CARBA- ZOLE SED, BM WS, <2MM DW, REC (UG/KG) (49449)	CHRY- SENE SED, BM WS, <2MM DW, REC (UG/KG) (49450)	PHTHAL- ATE, DIBUTYL SED, BM WS, <2MM DW, REC (UG/KG) (49381)	PHTHAL ATE, D IOCTYL SED, BM WS, <2MM DW, REC (UG/KG) (49382)	DIBENZ (AH),AN THRACEN SED, BM WS, <2MM DW, REC (UG/KG) (49461)	THIOPH ENE,DI- BENZO- SED, BM WS, <2MM DW, REC (UG/KG) (49452)	PHTHAL- ATE, D IETHYL SED, BM WS, <2MM DW, REC (UG/KG) (49383)	PHTHAL- ATE,DI- METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49384)	FLUOR- ANTHENE BED MAT WS <2MM DRY WGT REC (UG/KG) (49466)	9H-FLU- ORENE SED, BM WS, <2MM DW, REC (UG/KG) (49399)
	JAN 04...	--	--	--	--	--	--	--	--	--	--	--	--
APR 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 16...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	M	E10	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
JUL 25...	--	--	--	--	--	--	--	--	--	--	--	--	--
DATE	INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390)	ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400)	ISO- QUINO- LINE, SED, BM WS, <2MM DW, REC (UG/KG) (49394)	DPROPYL AMINE,N NITROSO SED, BM WS, <2MM DW, REC (UG/KG) (49431)	DIPHNYL AMINE,N NITROSO SED, BM WS, <2MM DW, REC (UG/KG) (49433)	NAPHTH- ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402)	BENZENE NITRO- SED, BM WS, <2MM DW, REC (UG/KG) (49444)	BENZENE PNTCHLR SED, BM WS, <2MM DW, REC (UG/KG) (49446)	PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409)	PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393)	PHENOL SED, BM WS, <2MM DW, REC (UG/KG) (49413)	PYRENE, SED, BM WS, <2MM DW, REC (UG/KG) (49387)	QUINO- LINE, SED, BM WS, <2MM DW, REC (UG/KG) (49392)
	JAN 04...	--	--	--	--	--	--	--	--	--	--	--	--
APR 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 16...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
JUL 25...	--	--	--	--	--	--	--	--	--	--	--	--	--

15087690 INDIAN RIVER NEAR SITKA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	METHANE 2CHLORO ETHOXY SED, BM WS, <2MM DW, REC (UG/KG) (49401)	BIS2CHL ETHYL ETHER SED, BM WS, <2MM DW, REC (UG/KG) (49456)	P- CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451)
JAN 04...	--	--	--
APR 04...	--	--	--
MAY 16...	--	--	--
16...	--	--	--
16...	<50	<50	<50
JUL 25...	--	--	--

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	---	---	---	46	46	46	51	42	50
2	---	---	---	---	---	---	47	46	46	44	36	41
3	---	---	---	---	---	---	47	47	47	45	39	42
4	---	---	---	---	---	---	48	47	47	47	45	46
5	---	---	---	---	---	---	48	47	48	47	27	39
6	---	---	---	---	---	---	48	48	48	43	36	41
7	---	---	---	---	---	---	49	48	48	44	41	43
8	---	---	---	---	---	---	49	48	49	45	42	43
9	---	---	---	---	---	---	49	49	49	47	45	46
10	---	---	---	---	---	---	50	49	49	48	47	48
11	---	---	---	---	---	---	50	49	50	49	48	48
12	---	---	---	---	---	---	50	50	50	49	31	45
13	---	---	---	---	---	---	51	50	50	37	30	34
14	---	---	---	---	---	---	51	50	51	42	28	36
15	---	---	---	---	---	---	51	50	51	43	37	41
16	---	---	---	---	---	---	51	51	51	45	38	42
17	---	---	---	---	---	---	52	51	51	45	39	43
18	---	---	---	---	---	---	53	51	52	44	42	44
19	---	---	---	---	---	---	53	51	52	44	39	42
20	---	---	---	---	---	---	54	52	52	46	42	44
21	---	---	---	---	---	---	53	52	53	47	43	46
22	---	---	---	---	---	---	53	53	53	46	42	44
23	---	---	---	---	---	---	54	53	53	47	46	46
24	---	---	---	---	---	---	54	53	53	48	47	47
25	---	---	---	42	41	41	54	53	53	48	48	48
26	---	---	---	43	42	42	53	51	52	49	48	48
27	---	---	---	45	43	44	51	41	44	48	46	47
28	---	---	---	45	45	45	49	46	47	48	48	48
29	---	---	---	45	43	44	50	49	49	48	39	47
30	---	---	---	45	44	44	51	50	50	39	29	34
31	---	---	---	46	45	45	51	50	50	---	---	---
MONTH	---	---	---	---	---	---	54	41	50	51	27	44

15087690 INDIAN RIVER NEAR SITKA--Continued

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	5.5	4.5	4.0
17	---	---	---	---	---	---	---	---	---	5.0	4.5	4.5
18	---	---	---	---	---	---	---	---	---	5.0	4.5	5.0
19	---	---	---	---	---	---	---	---	---	6.0	4.5	5.0
20	---	---	---	---	---	---	---	---	---	5.0	4.5	5.0
21	---	---	---	---	---	---	---	---	---	5.5	4.5	5.0
22	---	---	---	---	---	---	---	---	---	5.0	4.5	4.5
23	---	---	---	---	---	---	---	---	---	5.0	4.5	4.5
24	---	---	---	---	---	---	---	---	---	5.5	4.5	4.5
25	---	---	---	---	---	---	---	---	---	6.0	4.5	5.0
26	---	---	---	---	---	---	---	---	---	6.0	4.5	5.0
27	---	---	---	---	---	---	---	---	---	6.0	5.0	5.5
28	---	---	---	---	---	---	---	---	---	6.0	5.0	5.5
29	---	---	---	---	---	---	---	---	---	5.5	4.5	5.0
30	---	---	---	---	---	---	---	---	---	5.5	4.5	5.0
31	---	---	---	---	---	---	---	---	---	5.5	4.5	5.0
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	JUNE			JULY			AUGUST			SEPTEMBER		
1	5.5	4.5	5.0	8.5	6.5	7.0	8.0	7.0	7.5	9.0	8.0	8.0
2	5.5	5.0	5.0	8.5	7.0	7.5	8.0	7.0	7.5	9.0	8.0	8.5
3	5.5	5.0	5.0	8.0	7.0	7.5	7.5	7.0	7.5	8.5	8.0	8.0
4	6.0	5.0	5.5	7.5	7.0	7.5	7.5	7.0	7.5	8.5	7.5	8.0
5	5.5	5.0	5.5	7.5	7.0	7.5	8.0	7.0	7.5	9.5	8.0	8.5
6	6.0	5.0	5.5	7.0	7.0	7.0	8.0	7.0	7.5	8.5	7.5	8.0
7	6.0	5.0	5.5	7.5	7.0	7.5	7.5	7.0	7.5	8.0	7.5	7.5
8	6.5	5.0	6.0	7.0	6.5	7.0	8.5	7.0	7.5	8.0	7.0	7.5
9	5.5	5.5	5.5	7.0	6.5	7.0	8.5	7.0	7.5	7.0	6.5	6.5
10	5.5	5.0	5.5	7.0	6.5	7.0	8.0	7.0	7.5	7.0	6.0	6.5
11	5.5	5.0	5.5	7.0	6.5	6.5	7.5	7.0	7.5	6.5	6.5	6.5
12	6.0	5.5	5.5	7.0	6.5	6.5	8.5	7.0	7.5	9.0	6.5	7.0
13	6.5	5.5	6.0	7.0	6.5	6.5	8.5	7.0	7.5	9.0	8.0	8.5
14	6.5	5.5	6.0	7.0	6.5	7.0	8.0	7.0	7.5	9.0	7.5	8.5
15	6.5	5.5	6.0	7.0	6.5	7.0	9.0	7.0	7.5	8.5	7.5	8.0
16	6.5	5.5	6.0	7.5	6.5	7.0	8.5	7.0	7.5	8.5	7.5	8.0
17	6.5	6.0	6.0	8.0	6.5	7.0	7.5	7.5	7.5	8.5	7.5	7.5
18	7.5	6.0	6.5	7.0	7.0	7.0	8.0	7.0	7.5	7.5	7.5	7.5
19	7.0	6.5	6.5	8.5	7.0	7.5	8.0	7.0	7.5	8.0	7.0	7.5
20	6.5	6.0	6.5	8.5	7.0	7.5	8.0	7.5	7.5	7.5	7.0	7.0
21	6.5	6.0	6.5	9.0	7.0	7.5	8.5	7.5	8.0	7.5	6.5	7.0
22	6.5	6.0	6.0	7.5	7.5	7.5	8.5	7.5	8.0	7.5	7.0	7.0
23	6.5	6.0	6.0	8.0	7.5	7.5	8.0	7.5	7.5	7.0	6.5	7.0
24	7.0	6.0	6.5	9.0	8.0	8.5	8.0	7.5	7.5	7.0	6.5	6.5
25	7.0	6.0	6.5	8.5	7.5	8.0	8.0	7.5	8.0	7.0	6.5	6.5
26	8.0	6.0	7.0	8.0	7.5	8.0	9.0	8.0	8.5	7.0	6.5	6.5
27	8.0	6.5	7.0	7.5	7.0	7.5	10.0	9.0	9.5	7.0	6.5	7.0
28	8.0	7.0	7.5	7.5	7.0	7.5	9.5	8.5	9.0	7.0	6.5	7.0
29	7.5	6.5	7.0	8.0	7.0	7.5	8.5	8.5	8.5	7.5	6.5	7.0
30	8.0	6.5	7.0	7.5	7.0	7.5	8.5	8.0	8.5	8.0	7.0	7.5
31	---	---	---	7.5	7.0	7.0	8.0	8.0	8.0	---	---	---
MONTH	8.0	4.5	6.1	9.0	6.5	7.3	10.0	7.0	7.7	9.5	6.0	7.4

15087700 INDIAN RIVER AT SITKA

LOCATION.--Lat 57°03'12", long 135°18'52", in NE¹/₄ SW¹/₄ SE¹/₄ sec. 36, T. 55 S., R. 63 E. (Sitka A-4 quad), Hydrologic Unit 19010203, Greater Sitka Borough, in Tongass National Forest, on Baranof Island, on right bank 500 ft upstream from Sawmill Creek Road, 600 ft downstream from Sheldon Jackson College Diversion, and 0.6 mi above mouth.

DRAINAGE AREA.--12.0 mi²

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 30 ft above sea level, from topographic map.

REMARKS. Records good. Flow is diverted 600 ft upstream to Sheldon Jackson College.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	53	52	39	175	69	33	51	118	49	31	20
2	39	40	58	56	93	54	29	66	91	49	29	84
3	53	280	56	159	118	48	28	156	91	49	27	53
4	41	93	74	85	76	44	75	111	91	50	27	30
5	51	60	1110	107	64	44	53	69	93	102	25	241
6	142	52	199	90	56	47	41	55	88	71	24	101
7	134	70	98	65	60	57	35	64	91	134	23	69
8	107	56	76	69	53	60	46	154	94	88	23	71
9	218	43	61	63	47	74	54	103	93	71	23	47
10	171	36	53	51	42	619	40	70	113	75	22	36
11	1140	104	47	45	37	797	37	69	78	68	21	30
12	322	100	42	42	36	247	39	71	72	65	21	118
13	276	53	37	48	257	134	37	70	77	50	20	566
14	213	41	32	47	105	103	34	e70	76	40	20	502
15	289	47	29	51	61	88	34	70	66	40	19	130
16	151	43	28	62	51	84	36	66	61	37	19	121
17	102	90	27	56	46	79	45	60	59	34	18	105
18	77	50	34	50	43	72	52	58	62	32	18	87
19	68	48	32	49	41	63	44	53	78	30	18	111
20	65	51	25	43	38	55	45	53	76	29	17	83
21	65	151	23	52	37	50	46	63	55	29	17	58
22	86	221	25	68	36	47	48	95	51	30	16	73
23	100	201	30	78	33	43	49	118	62	33	16	53
24	76	134	30	57	31	41	63	83	61	56	15	44
25	59	100	34	46	29	44	52	63	58	63	15	39
26	50	106	34	41	92	47	49	59	56	48	17	33
27	44	120	30	124	235	41	57	71	59	35	57	38
28	38	71	29	108	96	43	51	87	63	32	27	32
29	33	54	28	60	---	39	48	93	56	37	20	35
30	35	46	35	61	---	39	47	90	51	41	18	420
31	80	---	43	185	---	50	---	149	---	33	18	---
TOTAL	4374	2614	2511	2157	2088	3322	1347	2510	2240	1600	681	3430
MEAN	141	87.1	81.0	69.6	74.6	107	44.9	81.0	74.7	51.6	22.0	114
MAX	1140	280	1110	185	257	797	75	156	118	134	57	566
MIN	33	36	23	39	29	39	28	51	51	29	15	20
MED	77	58	34	57	52	54	46	70	74	48	20	70
AC-FT	8680	5180	4980	4280	4140	6590	2670	4980	4440	3170	1350	6800

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)#

	MEAN	204	69.1	129	84.6	42.4	63.1	68.7	97.4	95.1	60.6	42.7	150
MAX	248	87.1	240	125	74.6	107	108	139	130	67.7	59.4	209	
(WY)	1999	2001	2000	1999	2001	2001	1999	1999	1999	2000	2000	2000	2000
MIN	141	38.0	66.8	59.4	23.6	28.2	44.9	72.3	74.7	51.6	22.0	114	
(WY)	2001	1999	1999	2000	1999	1999	2001	2000	2001	2001	2001	2001	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1999 - 2001
ANNUAL TOTAL	30341	28874	
ANNUAL MEAN	82.9	79.1	92.6
HIGHEST ANNUAL MEAN			103
LOWEST ANNUAL MEAN			79.1
HIGHEST DAILY MEAN	1590	1140	2390
LOWEST DAILY MEAN	17	15	14
ANNUAL SEVEN-DAY MINIMUM	17	16	16
MAXIMUM PEAK FLOW		a4170	a5740
MAXIMUM PEAK STAGE		26.08	26.84
INSTANTANEOUS LOW FLOW		b14	c14
ANNUAL RUNOFF (AC-FT)	60180	57270	67090
10 PERCENT EXCEEDS	151	122	167
50 PERCENT EXCEEDS	53	53	55
90 PERCENT EXCEEDS	23	29	23

e Estimated

a From rating curve extended above 1050 ft³/s

b Aug. 24 and 25

c Mar. 9, 1999 and Aug. 24 and 25, 2001

15087700 INDIAN RIVER AT SITKA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- Water years 1967-68, January to September 2001.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July to September 2001.

WATER TEMPERATURE: May to September 2001.

INSTRUMENTATION.--Electronic water temperature and specific conductance recorder set to 15-minute recording interval.

REMARKS.--

SPECIFIC CONDUCTANCE: Probe installed May 16, no record May 16 to July 25 due to recorder problems. Record represents specific conductance at sensor within 3us/cm. No variation was found within the cross section measured on July 25. No variation was found between the mean stream specific conductance and specific conductance at the sensor.

WATER TEMPERATURE: Probe installed on May 16. Record represents water temperature at sensor within 0.5°C. No variation was found within the cross section on July 25. Temperature at the sensor was compared with stream average by cross sections on May 15 and July 25. No variation was found within the cross section. No variation was found between the mean stream temperature and temperature at the sensor.

EXTREMES OUTSIDE PERIOD OF DAILY RECORD.--

WATER TEMPERATURE.--Minimum observed, a temperature of 3.0°C was measured on April 4.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE.--Maximum recorded, 66 us/cm, August 25; minimum recorded, 30 us/cm September 5, 14, 30.

WATER TEMPERATURE.--Maximum recorded, 10.0°C, several days in July and August; minimum recorded, 4.0°C May 25.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (000009)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (000095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)
JUL							
25...	1201	15.0	40	7.1	8.5	760	11.7
25...	1202	20.0	40	7.1	8.5	760	11.8
25...	1203	25.0	40	7.1	8.5	760	12.0
25...	1204	30.0	40	7.1	8.5	760	12.3
25...	1205	35.0	40	7.1	8.5	760	12.0
25...	1206	40.0	40	7.1	8.5	760	12.1
25...	1207	45.0	40	7.1	8.5	760	12.3
25...	1208	50.0	40	7.1	8.5	760	12.2

DATE	TIME	MEDIUM CODE	SAMPLE TYPE	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM- PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL AS (MG/L) (00900)	CALCIUM DIS- SOLVED AS (MG/L) (00915)
JAN													
04...	1420	9	9	22.12	76	10	3045	42	7.4	--	--	14	4.73
APR													
04...	1215	9	9	22.12	78	10	3045	40	7.3	3.0	14.1	14	4.71
MAY													
15...	1500	9	9	22.08	75	10	3045	42	7.6	5.5	12.0	17	6.00
15...	1530	9	9	--	--	8010	8010	--	--	--	--	--	--
15...	1600	H	9	--	--	8010	8010	--	--	--	--	--	--
JUL													
25...	1145	9	9	22.05	63	10	3045	40	7.1	8.5	12.0	15	5.22

DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ANC WATER UNFLTRD FET FIELD (MG/L AS CACO3) (00410)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
JAN														
04...	.534	2.0	--	<.24	--	--	1.5	3.9	<.2	3.1	31	--	.001	
APR														
04...	.554	2.2	--	.21	13	11	1.7	4.0	<.2	3.3	34	23	.001	
MAY														
15...	.570	2.0	16	.12	18	14	1.3	3.8	<.2	3.0	30	26	<.001	
15...	--	--	--	--	--	--	--	--	--	--	--	--	--	
15...	--	--	--	--	--	--	--	--	--	--	--	--	--	
JUL														
25...	.559	2.3	--	.82	16	14	1.6	2.5	<.2	3.5	--	25	<.001	

15087700 INDIAN RIVER AT SITKA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	H-2 / H-1 STABLE ISOTOPE RATIO PER MIL (82082)	O-16 / O-18 STABLE ISOTOPE RATIO PER MIL (82085)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, INOR- GANIC. PARTIC TOTAL (MG/L AS C) (00688)	
JAN 04...	.124	<.002	<.08	<.10	<.004	<.006	<.007	30	E2.0	--	--	1.9	<.1	
APR 04...	<.005	.004	E.06	E.07	E.002	<.006	.009	60	4.6	--	--	2.4	<.1	
MAY 15...	.112	<.002	<.08	<.10	<.004	<.006	<.007	M	<3.0	--	--	.70	<.1	
15...	--	--	--	--	--	--	--	--	--	-78.80	-11.07	--	--	
15...	--	--	--	--	--	--	--	--	--	--	--	--	--	
JUL 25...	.088	.004	E.04	E.06	E.003	E.003	<.007	70	E1.9	--	--	2.4	<.1	

	CARBON, ORGANIC PARTIC- ULATE	CARBON, INORG + ORGANIC PARTIC.	IRON, DIOXIDE + FERTILIZER RESIDUE	SEDIM- ENT, DIS- CHARGE, SUS- PENDE	BENZENE HEXA- CHLORO- SED, BM WS, <2MM	PENTA- CHLORO- ANISOLE SED, BM WS, <2MM	ALUMI- NUM BOT MAT <63U WS	ANTI- MONY BOT MAT <63U WS	ARSENIC BOT MAT <63U WS	BARIUM BOT MAT <63U WS	BERYL- LIUM BOT MAT <63U WS	BISMUTH BOT MAT <180UWS	
DATE	TOTAL (MG/L AS C) (00689)	TOTAL (MG/L AS C) (00694)	WAT FLT SUSP (MG/L AS N) (49570)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDIM- ENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	BENZENE HEXA- CHLORO- SED, BM WS, <2MM (UG/KG) (49343)	PENTA- CHLORO- ANISOLE SED, BM WS, <2MM (UG/KG) (49460)	ALUMI- NUM BOT MAT <63U WS FIELD (UG/G) (34790)	ANTI- MONY BOT MAT <63U WS FIELD (UG/G) (34795)	ARSENIC BOT MAT <63U WS FIELD (UG/G) (34800)	BARIUM BOT MAT <63U WS FIELD (UG/G) (34805)	BERYL- LIUM BOT MAT <63U WS FIELD (UG/G) (34810)	BISMUTH BOT MAT <180UWS FIELD (UG/G) (34816)
JAN 04...	<.1	<.1	<.022	1	.21	--	--	--	--	--	--	--	
APR 04...	.4	.4	.106	1	.21	--	--	--	--	--	--	--	
MAY 15...	<.1	<.1	<.022	--	--	--	--	--	--	--	--	--	
15...	--	--	--	--	--	--	--	--	--	--	--	--	
15...	--	--	--	--	--	<50	<50	7.6	1.0	33	630	1.1	<1
JUL 25...	.2	.2	<.022	1	.17	--	--	--	--	--	--	--	

[illegible][illegible]

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

[illegible][illegible][illegible][illegible]

15087700 INDIAN RIVER AT SITKA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	PHTHALA TE,BIS2 ETHHEXL SED, BM WS,<2MM DW, REC (UG/KG) (49426)	PHTHALA TEBUTYL BENZYL- SED, BM WS,<2MM DW, REC (UG/KG) (49427)	PHENOL C8- ALKYL- SED, BM WS,<2MM DW, REC (UG/KG) (49424)	CARBA- ZOLE SED, BM WS,<2MM DW, REC (UG/KG) (49449)	CHRY- SENE SED, BM WS,<2MM DW, REC (UG/KG) (49450)	PHTHAL- ATE, DIBUTYL SED, BM WS,<2MM DW, REC (UG/KG) (49381)	PHTHAL ATE, D IOCTYL SED, BM WS,<2MM DW, REC (UG/KG) (49382)	DIBENZ (AH),AN THRACEN SED, BM WS,<2MM DW, REC (UG/KG) (49461)	THIOPH ENE,DI- BENZO- SED, BM WS,<2MM DW, REC (UG/KG) (49452)	PHTHAL- ATE, D IETHYL SED, BM WS,<2MM DW, REC (UG/KG) (49383)	PHTHAL- ATE,DI- METHYL SED, BM WS,<2MM DW, REC (UG/KG) (49384)	FLUOR- ANTHENE BED MAT WS <2MM DRY WGT REC (UG/KG) (49466)	9H-FLU- ORENE SED, BM WS,<2MM DW, REC (UG/KG) (49399)
JAN 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	M	E20	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
JUL 25...	--	--	--	--	--	--	--	--	--	--	--	--	--

DATE	INDENO 123-CD PYRENE SED, BM WS,<2MM DW, REC (UG/KG) (49390)	ISOPHOR ONE SED, BM WS,<2MM DW, REC (UG/KG) (49400)	ISO- QUINO- LINE, SED, BM WS,<2MM DW, REC (UG/KG) (49394)	DPROPYL AMINE,N NITROSO SED, BM WS,<2MM DW, REC (UG/KG) (49431)	DIPHNYL AMINE,N NITROSO SED, BM WS,<2MM DW, REC (UG/KG) (49433)	NAPHTH- ALENE, SED, BM WS,<2MM DW, REC (UG/KG) (49402)	BENZENE NITRO- SED, BM WS,<2MM DW, REC (UG/KG) (49444)	BENZENE PNTCHLR NITRO- SED, BM WS,<2MM DW, REC (UG/KG) (49446)	PHENAN THRENE SED, BM WS,<2MM DW, REC (UG/KG) (49409)	PHENAN- THRI- DINE SED, BM WS,<2MM DW, REC (UG/KG) (49393)	PHENOL SED, BM WS,<2MM DW, REC (UG/KG) (49413)	PYRENE, SED, BM WS,<2MM DW, REC (UG/KG) (49387)	QUINO- LINE, SED, BM WS,<2MM DW, REC (UG/KG) (49392)
JAN 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
JUL 25...	--	--	--	--	--	--	--	--	--	--	--	--	--

DATE	METHANE 2CHLORO ETHOXY SED, BM WS,<2MM DW, REC (UG/KG) (49401)	BIS2CHL ETHYL ETHER SED, BM WS,<2MM DW, REC (UG/KG) (49456)	P- CRESOL SED, BM WS,<2MM DW, REC (UG/KG) (49451)
JAN 04...	--	--	--
APR 04...	--	--	--
MAY 15...	--	--	--
15...	--	--	--
15...	<50	<50	<50
JUL 25...	--	--	--

15087700 INDIAN RIVER AT SITKA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	---	---	---	51	49	50	63	50	60
2	---	---	---	---	---	---	52	50	50	50	41	46
3	---	---	---	---	---	---	53	50	51	50	44	48
4	---	---	---	---	---	---	52	51	51	54	50	52
5	---	---	---	---	---	---	53	51	52	55	30	44
6	---	---	---	---	---	---	53	52	52	48	38	44
7	---	---	---	---	---	---	54	52	53	48	45	47
8	---	---	---	---	---	---	56	53	54	49	45	47
9	---	---	---	---	---	---	56	53	54	51	49	50
10	---	---	---	---	---	---	59	54	54	54	50	52
11	---	---	---	---	---	---	57	54	55	54	51	53
12	---	---	---	---	---	---	57	55	56	55	33	50
13	---	---	---	---	---	---	58	56	57	40	32	36
14	---	---	---	---	---	---	59	57	58	45	30	38
15	---	---	---	---	---	---	60	58	59	50	39	44
16	---	---	---	---	---	---	60	58	59	47	40	44
17	---	---	---	---	---	---	61	59	60	48	41	46
18	---	---	---	---	---	---	62	60	61	48	45	46
19	---	---	---	---	---	---	62	60	61	48	42	44
20	---	---	---	---	---	---	63	61	62	49	44	47
21	---	---	---	---	---	---	63	62	62	50	48	49
22	---	---	---	---	---	---	64	63	63	50	45	47
23	---	---	---	---	---	---	65	63	64	51	49	50
24	---	---	---	---	---	---	65	64	65	52	50	51
25	---	---	---	---	---	---	66	64	65	52	50	51
26	---	---	---	47	45	46	65	62	64	53	51	52
27	---	---	---	49	47	48	62	47	52	52	50	51
28	---	---	---	50	48	49	58	53	56	52	51	51
29	---	---	---	50	47	48	61	58	59	52	44	51
30	---	---	---	49	47	48	63	60	61	44	30	36
31	---	---	---	50	48	49	62	59	60	---	---	---
MONTH	---	---	---	---	---	---	66	47	57	63	30	48

15087700 INDIAN RIVER AT SITKA--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	6.0	4.5	5.0
17	---	---	---	---	---	---	---	---	---	5.5	4.5	5.0
18	---	---	---	---	---	---	---	---	---	5.5	4.5	5.0
19	---	---	---	---	---	---	---	---	---	6.5	4.5	5.5
20	---	---	---	---	---	---	---	---	---	5.5	4.5	5.0
21	---	---	---	---	---	---	---	---	---	6.0	5.0	5.0
22	---	---	---	---	---	---	---	---	---	5.5	4.5	5.0
23	---	---	---	---	---	---	---	---	---	5.0	4.5	4.5
24	---	---	---	---	---	---	---	---	---	6.0	4.5	5.0
25	---	---	---	---	---	---	---	---	---	7.0	4.0	5.0
26	---	---	---	---	---	---	---	---	---	7.0	4.5	5.5
27	---	---	---	---	---	---	---	---	---	6.5	5.0	5.5
28	---	---	---	---	---	---	---	---	---	7.0	5.0	6.0
29	---	---	---	---	---	---	---	---	---	5.5	5.0	5.5
30	---	---	---	---	---	---	---	---	---	5.5	4.5	5.0
31	---	---	---	---	---	---	---	---	---	5.5	5.0	5.5
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	6.0	4.5	5.0	9.0	7.0	7.5	8.5	7.5	8.0	9.0	8.5	8.5
2	6.0	5.0	5.5	9.5	7.0	8.0	9.0	7.5	8.0	9.5	8.5	9.0
3	6.0	5.0	5.5	9.0	7.5	8.0	8.5	7.5	8.0	9.0	8.5	8.5
4	6.5	5.0	5.5	8.0	7.5	7.5	8.5	7.5	8.0	9.5	8.0	8.5
5	6.0	5.0	5.5	8.0	7.5	7.5	9.5	7.5	8.5	9.5	8.0	8.5
6	6.0	5.0	5.5	7.5	7.0	7.5	9.0	7.5	8.0	9.0	8.0	8.5
7	7.0	5.5	6.0	8.0	7.0	7.5	9.0	7.5	8.0	8.0	7.5	8.0
8	7.5	5.5	6.0	7.5	7.0	7.0	10.0	7.5	8.5	8.0	7.5	8.0
9	6.0	5.5	6.0	7.5	7.0	7.0	10.0	7.5	8.5	8.0	6.5	7.0
10	6.0	5.5	5.5	8.0	7.0	7.0	10.0	7.5	8.5	7.5	6.5	7.0
11	6.0	5.5	5.5	7.5	7.0	7.0	9.0	8.0	8.5	7.0	6.5	7.0
12	6.0	5.5	6.0	7.0	6.5	7.0	10.0	7.5	8.5	9.0	7.0	7.5
13	7.0	5.5	6.0	7.0	7.0	7.0	10.0	7.5	8.5	9.0	8.5	8.5
14	7.0	5.5	6.0	7.5	7.0	7.0	9.0	8.0	8.5	9.0	8.0	8.5
15	7.0	5.5	6.0	8.0	7.0	7.5	10.0	8.0	9.0	9.0	7.5	8.0
16	7.5	6.0	6.5	8.0	7.0	7.5	10.0	8.0	9.0	8.5	8.0	8.0
17	7.0	6.0	6.5	9.0	6.5	7.5	9.0	8.5	8.5	9.0	7.5	8.0
18	8.5	6.0	7.0	7.5	7.5	7.5	9.0	8.0	8.5	8.0	7.5	8.0
19	7.5	6.5	7.0	9.5	7.0	8.0	9.0	8.0	8.5	8.0	7.5	8.0
20	7.0	6.5	7.0	10.0	7.5	8.5	9.0	8.5	8.5	8.0	7.0	7.5
21	7.5	6.5	6.5	10.0	7.5	8.5	9.5	8.5	9.0	7.5	7.0	7.0
22	7.0	6.0	6.5	8.5	8.0	8.0	9.5	8.0	9.0	7.5	7.0	7.5
23	6.5	6.0	6.5	8.5	8.0	8.0	9.0	8.5	8.5	7.5	7.0	7.0
24	7.5	6.0	7.0	9.0	8.0	8.5	9.0	8.5	8.5	7.0	7.0	7.0
25	7.5	6.5	7.0	8.5	8.0	8.0	9.5	8.5	9.0	7.0	6.5	7.0
26	9.0	6.5	7.5	8.5	8.0	8.0	9.5	8.5	9.0	7.0	6.5	7.0
27	9.0	6.5	7.5	8.0	7.5	8.0	10.0	9.0	9.5	7.0	7.0	7.0
28	8.5	7.0	8.0	8.5	7.5	8.0	10.0	9.0	9.5	7.5	7.0	7.0
29	8.5	7.0	7.5	8.5	7.5	8.0	9.5	9.0	9.0	7.0	6.5	7.0
30	9.0	7.0	7.5	8.0	7.5	8.0	9.5	9.0	9.0	8.0	7.0	7.5
31	---	---	---	8.0	7.5	7.5	9.0	8.5	8.5	---	---	---
MONTH	9.0	4.5	6.4	10.0	6.5	7.7	10.0	7.5	8.6	9.5	6.5	7.7

15088000 SAWMILL CREEK NEAR SITKA

LOCATION.--Lat 57°03'05", long 135°13'40", in NE¹/₄ SW¹/₄ sec. 34, T. 55 S., R. 64 E. (Sitka A-4 quad.), Hydrologic Unit 19010401, on Baranof Island, in Tongass National Forest, on left bank 500 ft upstream from mouth, 1.6 mi downstream from Blue Lake, and 4.0 mi east of Sitka.

DRAINAGE AREA.--39.0 mi².

PERIOD OF RECORD.-- September 1920 to December 1923, February 1928 to September 1942, October 1945 to September 1957, 1994 (peak discharge only, published in WRD AK 95-1), and May to September 2001. Records prior to 1945 furnished by U.S. Forest Service.

REVISED RECORDS.-- WSP 1372: 1921-22 and 1928-36.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is sea level, from topographic map. Prior to April 1947, staff gages or water-stage recorders at several sites within 1,700 ft of present site at various datums. April 1947 to September 1957 at site about 200 ft upstream at different datum.

REMARKS.-- No estimated daily discharges. Records good. Minor regulation above station by Sitka Public Utilities hydroelectric plant during periods 1920-23 and 1937-42. In 1959, Blue Lake Dam, 1.6 mi upstream, was completed. The area of the lake is 1225 acres. The dam is concrete with a spillway elevation of 342.0 ft above sea level. In 1960, the Blue Lake Hydro plant, located 400 ft downstream from gage, was put into operation. Water is taken from Blue Lake and piped via a penstock to Blue Lake hydro, through 2-3,000 kw turbines and discharged back into Sawmill Creek just below high tide level. This penstock also provides water for the City of Sitka and for the filter plant for the Sitka Sawmill. In the years following, Campground Hydro, a smaller generation plant was constructed about 1,000 ft below Blue Lake Dam. It also has a penstock from Blue Lake and discharges directly into Sawmill Creek. A fish bypass valve has been installed at Campground Hydro that automatically releases 50 ft³/s to the tailrace anytime the hydro plant is shut down. Another small generator was installed just above the Sawmill Filter Plant diversion from Blue Lake Hydro penstock with the capability of bypassing the filter plant and discharging back into Sawmill Creek above the gage site. Water that went to the filter plant was piped to the sawmill and eventually discharged directly into Silver Bay. The sawmill has since closed and water is now supplied to Sawmill Cove Industrial Park. Flow is constantly regulated except when Blue Lake is spilling.

EXTREMES FOR PERIOD OF RECORD.-- Maximum discharge, 10,700 ft³/s, November 19, 1993, by computation of peak flow on the basis of a slope-area computation below Campground Hydro and adding diversion values at the time of peak between Campground Hydro and gage; peak flow below Blue Lake Tailrace was computed to be 11,100 ft³/s; gage height unknown; minimum discharge 9.1 ft³/s, Mar. 4, 1951.

EXTREMES OUTSIDE PERIOD OF RECORD.-- It was reported that in October 1972, a storm produced a peak elevation at Blue Lake of 353.0 ft or 11.0 ft of spill at the spillway. Extending the spillway rating, this flood was estimated to be 17,000 ft³/s. It was reported to have been the largest since 1921.

EXTREMES FOR CURRENT YEAR.-- Maximum discharge during period May to September, 2920 ft³/s, September 30, gage height 16.09 ft; minimum 59 ft³/s July 18-19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	90	80	528	722
2	---	---	---	---	---	---	---	---	87	80	456	1740
3	---	---	---	---	---	---	---	---	88	80	362	1150
4	---	---	---	---	---	---	---	---	87	81	287	584
5	---	---	---	---	---	---	---	---	74	87	229	586
6	---	---	---	---	---	---	---	---	79	85	179	1020
7	---	---	---	---	---	---	---	---	86	101	148	780
8	---	---	---	---	---	---	---	---	86	91	120	1000
9	---	†64	---	---	---	---	---	---	87	87	110	609
10	---	---	---	---	---	---	---	---	91	85	107	290
11	---	---	---	---	---	---	---	---	85	85	104	141
12	---	---	---	---	---	---	---	---	84	85	95	118
13	---	---	---	---	---	---	---	---	85	86	87	1120
14	---	---	---	---	---	---	---	---	84	87	96	1960
15	---	---	---	---	---	---	---	---	83	85	110	1190
16	---	---	---	---	---	---	---	---	83	86	111	967
17	---	---	---	---	---	---	---	79	82	81	98	649
18	---	---	---	---	---	---	---	80	83	64	80	527
19	---	---	---	---	---	---	---	80	84	71	67	508
20	---	---	---	---	---	---	---	81	83	78	100	415
21	---	---	---	---	---	---	---	83	82	78	551	243
22	---	---	---	---	---	---	---	87	81	78	622	251
23	---	---	---	---	---	---	---	90	82	82	373	218
24	---	---	---	---	---	---	---	86	82	263	251	186
25	---	---	---	---	---	---	---	83	81	463	207	204
26	---	---	---	---	---	---	---	84	81	407	359	160
27	---	---	---	---	---	---	---	87	81	326	1120	181
28	---	---	---	---	---	---	---	88	81	282	988	225
29	---	---	---	---	---	---	---	87	81	337	509	757
30	---	---	---	---	---	---	---	86	80	568	310	2370
31	---	---	---	---	---	---	---	97	---	574	251	---
TOTAL	---	---	---	---	---	---	---	---	2503	5123	9015	20871
MEAN	---	---	---	---	---	---	---	---	83.4	165	291	696
MAX	---	---	---	---	---	---	---	---	91	574	1120	2370
MIN	---	---	---	---	---	---	---	---	74	64	67	118

† Result of discharge measurement

15088200 SILVER BAY TRIBUTARY AT BEAR COVE NEAR SITKA

LOCATION.--Lat 57°01'09", long 135°09'45", in SW¹/₄ NW¹/₄ NE¹/₄ sec. 13, T. 56 S., R. 64 E. (Sitka A-4 quad), Hydrologic Unit 19010203, in Tongass National Forest, on Baranof Island, on right bank 350 ft upstream from mouth, and 6.5 mi southwest of Sitka.

DRAINAGE AREA.--0.38 mi².

PERIOD OF RECORD.-- October 1999 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 110 ft above sea level, from topographic map.

REMARKS.-- Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	2.4	e1.5	e1.3	5.1	2.7	2.1	2.6	6.4	1.6	.97	9.9
2	.84	3.3	e1.7	e2.0	3.6	2.4	2.1	5.1	6.3	1.7	.53	17
3	3.5	17	e1.6	e5.2	3.2	2.2	1.9	9.2	6.3	1.5	.33	3.6
4	1.2	2.6	e1.9	e3.2	2.3	1.9	2.6	4.6	7.7	2.6	.31	1.2
5	4.1	1.3	e25	e4.7	2.0	2.2	1.1	2.1	6.5	3.5	.24	15
6	8.7	1.8	e6.5	e4.4	1.8	2.8	1.3	1.3	5.9	2.3	.18	8.3
7	15	4.8	e5.5	3.0	1.9	3.5	1.9	5.1	6.5	3.9	.14	3.4
8	9.0	e1.7	e2.2	2.8	1.7	3.0	2.1	12	8.6	1.8	.14	3.6
9	16	e1.4	e2.7	2.3	1.6	3.0	2.4	4.3	7.9	1.5	.13	1.0
10	9.7	e1.2	e2.3	1.8	1.5	8.2	2.1	2.1	7.3	1.2	.12	.36
11	15	2.5	e2.0	1.6	1.5	7.4	2.0	2.8	3.3	.79	.11	.16
12	10	2.7	e1.7	1.5	1.5	3.8	1.5	4.0	3.7	1.1	.10	8.7
13	6.0	2.0	e1.5	1.6	7.5	2.7	1.3	4.6	5.9	1.2	.11	13
14	12	e1.2	e1.4	1.8	3.1	2.3	1.7	5.1	4.7	2.1	.10	8.0
15	10	e1.3	e1.3	3.0	2.3	2.2	2.1	4.8	3.1	1.3	.09	8.1
16	4.9	e1.2	e1.2	3.1	2.0	2.1	2.7	3.7	2.7	1.3	.09	2.6
17	2.2	e2.6	e1.1	3.0	1.8	2.3	4.3	2.7	3.1	1.0	.07	3.7
18	1.9	e1.8	e1.9	2.7	1.9	2.2	3.8	3.1	5.0	e.96	.06	3.6
19	2.2	e1.5	e1.7	2.8	2.0	1.8	3.7	3.6	7.4	e.90	.06	8.0
20	2.2	e1.8	e1.0	2.2	1.8	1.6	4.9	3.4	4.9	e.86	.07	1.9
21	1.6	e3.2	e1.1	3.0	2.2	1.5	5.1	3.9	2.9	e.81	.20	1.0
22	4.9	e4.4	e1.1	3.6	2.5	1.5	3.7	7.3	2.2	e.80	.10	2.0
23	5.4	e3.7	e1.2	3.4	2.0	1.5	2.4	6.8	3.8	e1.5	.09	1.4
24	3.6	e3.2	e1.1	2.6	1.8	1.6	3.8	3.8	2.4	7.4	.09	1.9
25	1.8	e2.9	e1.3	2.5	1.7	4.3	2.3	3.1	1.9	3.2	.16	1.5
26	1.1	e3.1	e1.2	2.1	6.3	3.2	4.0	3.9	2.3	2.3	2.5	1.1
27	.83	e3.5	e1.1	4.8	9.1	2.5	4.1	7.2	3.5	1.4	5.6	2.0
28	.52	e2.2	e1.1	3.1	3.3	2.3	2.4	8.1	2.8	1.7	.74	1.8
29	.39	e1.8	e1.0	2.3	---	2.5	2.4	5.7	1.6	3.9	.24	24
30	3.4	e1.4	e1.3	2.2	---	2.5	2.1	6.2	2.0	2.5	.19	17
31	6.3	---	e1.4	8.6	---	2.4	---	17	---	1.2	.25	---
TOTAL	165.68	85.5	78.6	92.2	79.0	86.1	79.9	159.2	138.6	59.82	14.11	174.82
MEAN	5.34	2.85	2.54	2.97	2.82	2.78	2.66	5.14	4.62	1.93	.46	5.83
MAX	16	17	25	8.6	9.1	8.2	5.1	17	8.6	7.4	5.6	24
MIN	.39	1.2	1.0	1.3	1.5	1.5	1.1	1.3	1.6	.79	.06	.16
MED	3.6	2.3	1.4	2.8	2.0	2.4	2.3	4.3	4.2	1.5	.14	3.5
AC-FT	329	170	156	183	157	171	158	316	275	119	28	347
CFSM	14.1	7.50	6.67	7.83	7.42	7.31	7.01	13.5	12.2	5.08	1.20	15.3
IN.	16.22	8.37	7.69	9.03	7.73	8.43	7.82	15.58	13.57	5.86	1.38	17.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2001, BY WATER YEAR (WY)#

	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
MEAN	6.43	3.70	5.13	2.33	1.96	2.57	2.39	5.43	5.41	3.43	2.23	6.09
MAX	7.52	4.56	7.73	2.97	2.82	2.78	2.66	5.73	6.20	4.93	4.00	6.36
(WY)	2000	2000	2000	2001	2001	2001	2001	2000	2000	2000	2000	2000
MIN	5.34	2.85	2.54	1.68	1.12	2.36	2.12	5.14	4.62	1.93	.46	5.83
(WY)	2001	2001	2001	2000	2000	2000	2000	2001	2001	2001	2001	2001

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 2000 - 2001

ANNUAL TOTAL	1382.27	1213.53	
ANNUAL MEAN	3.78	3.32	3.93
HIGHEST ANNUAL MEAN			4.54
LOWEST ANNUAL MEAN			3.32
HIGHEST DAILY MEAN	41 Sep 4	25 Dec 5	41 Sep 4 2000
LOWEST DAILY MEAN	a.12 Jan 17	b.06 Aug 18	b.06 Aug 18 2001
ANNUAL SEVEN-DAY MINIMUM	.12 Jan 16	.08 Aug 14	.08 Aug 14 2001
MAXIMUM PEAK FLOW		61 Sep 1	69 Aug 23 2000
MAXIMUM PEAK STAGE		19.53 Sep 1	19.58 Aug 23 2000
INSTANTANEOUS LOW FLOW		c.05 Aug 17	c.05 Aug 17 2001
ANNUAL RUNOFF (AC-FT)	2740	2410	2850
ANNUAL RUNOFF (CFSM)	9.94	8.75	10.4
ANNUAL RUNOFF (INCHES)	135.32	118.80	140.64
10 PERCENT EXCEEDS	8.3	7.3	8.3
50 PERCENT EXCEEDS	2.4	2.3	2.6
90 PERCENT EXCEEDS	.50	.84	.66

a Jan. 17-20, and 25-26

b Aug. 18-19, 2001

c Aug. 17-19, 2001

e Estimated

15090000 GREEN LAKE NEAR SITKA

LOCATION.--Lat 56°59'14", long 135°06'37", in SW¹/₄ NE¹/₄ sec. 29, T. 56 S., R. 65 E. (Port Alexander D-4 quad), Hydrologic Unit 19010203, Greater Sitka Borough, on Baranof Island, in Tongass National Forest, 0.4 mi upstream from mouth at Silver Bay, and 9.4 mi southeast of Sitka.

DRAINAGE AREA.--28.8 mi².

PERIOD OF RECORD.--September 1915 to September 1925 (published as "Green Lake Outlet"); monthly discharges only published in WSP 1372. October 1983 to current year (month end reservoir contents and monthly discharges).

REVISED RECORDS.--WSP 1372: 1916, 1917, 1922 (monthly discharge). WDR AK-84-1: Drainage area. WDR AK-86-1: 1984, 1985 (month-end reservoir contents, change in month-end and yearly contents, adjusted mean monthly discharges, and extremes). WRD AK-00-01: 1998-1999 (M m).

GAGE.--Staff gage on upstream face of dam. Datum of gage is at mean low water, which is about 5 ft below sea level. Totalizing MWH meters are on the two turbines in Green Lake powerhouse. September 1915 to September 1925, recording gage at site of present day dam, elevation of gage was 220 ft above sea level, by barometer; prior to December 27, 1916 at datum 1 ft higher. Water years 1983-88, nonrecording remote lake-level indicator at Blue Lake powerhouse (6 mi northwest of gage).

REMARKS.--Reservoir is formed by concrete arch dam located at the outlet of Green Lake, construction began in 1978 and was completed in 1982. Total and usable capacity below spillway crest elevation of 395 ft is 88,000 and 75,000 acre-ft, respectively. Reservoir is used for power. Discharge released through the turbines is computed from relation between discharge, head, and power generation; release flow empties directly into Silver Bay and is not returned to stream. Spill is computed from a theoretical relation between discharge and stage above the crest of the 100 ft wide spillway. Turbine and spillway ratings and reservoir capacity table furnished by City and Borough of Sitka in 1983. Corrected reservoir capacity table furnished in April 1987.

COOPERATION.--Daily reservoir elevations and MWH power generation provided by City and Borough of Sitka.

AVERAGE DISCHARGE.--27 years (water years, 1916-25, 1985-2001), 317 ft³/s, 149.5 in/yr, 229,700 acre-ft/yr. Mean discharge for water years 1985-99 adjusted for change in contents of Green Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 93,780 acre-ft, September 22-23, 1994, elevation, 400.5 ft; minimum contents observed, 23,170 acre-ft, June 1, 1996, elevation, 307.6 ft; Maximum daily discharge, 5,020 ft³/s, September 22-23, 1994; no flow released, February 5-8, 1987 and November 27-29, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 91,050 acre-ft, September 29, elevation 397.9 ft; minimum contents observed, 62,280 acre-ft, April 26, elevation 366.5 ft; Maximum daily discharge (not adjusted for storage) 1,870 ft³/s, September 29; minimum daily discharge, 111 ft³/s, July 2.

MONTH END RESERVOIR ELEVATION, IN FEET, AND CONTENTS, IN ACRE FEET
WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ELEVATION	CONTENTS	CHANGE IN CONTENTS
SEP 30	395.9	88,950	
OCT 31	394.5	87,530	-1420
NOV 30	395.2	88,210	+680
DEC 31	388.2	81,540	-6670
JAN 31	385.2	78,690	-2850
FEB 28	380.3	74,270	-4420
MAR 31	371.9	66,870	-7400
APR 30	366.7	62,450	-4420
MAY 31	371.9	66,870	+4420
JUN 30	393.2	86,290	+19420
JUL 31	396.0	89,050	+2760
AUG 31	396.1	89,160	+110
SEP 30	397.7	90,840	+1680
		CAL YR 2000	-7300
		WTR YR 2001	-1890

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
MEAN VALUES

MONTH	RELEASE	SPILL	TOTAL	ADJUSTED
OCT	183	415	598	575
NOV	208	83	290	302
DEC	202	104	306	198
JAN	205	0	205	159
FEB	200	0	200	123
MAR	221	0	221	101
APR	171	0	171	97
MAY	146	0	146	218
JUN	136	0	136	462
JUL	134	459	593	638
AUG	123	474	597	599
SEP	120	738	858	886
CAL YR 2000	202	143	345	335
WTR YR 2001	171	191	361	364

15101490 GREENS CREEK AT GREENS CREEK MINE NEAR JUNEAU

LOCATION.--Lat 58°05'00", long 134°37'54", in NW¹/₄ SE¹/₄ sec. 4, T. 44 S., R. 66 E. (Juneau A-2 quad), Hydrologic Unit 19010204, on Admiralty Island, in Admiralty Island National Monument, Tongass National Forest, on right bank, 100 ft upstream from mine portal, 0.3 mi downstream from Big Sore Creek, 7.0 mi upstream from mouth at Hawk Inlet, and 19 mi southwest of Juneau.

DRAINAGE AREA.--8.62 mi².

PERIOD OF RECORD.--August 1989 to current year.

REVISED RECORD.--WRD AK-99-1, 1990-1994(M), 1996-1998(M).

GAGE.--Water-stage recorder. Datum of gage is 890.16 ft above sea level (levels by Greens Creek Mining Company). Prior to February 16, 1999, recording gage at site 30 ft upstream at datum 9.84 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Greens Creek Mining Company pumps water from gage pool for use in mill. Diversion flow is recorded on totalizing meters in gage house. Pump records are available from Greens Creek Mining Company.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	22	27	16	31	11	4.2	31	122	88	42	42
2	31	25	25	29	32	9.3	3.8	30	108	83	36	94
3	30	70	21	86	24	8.4	3.8	37	106	78	33	75
4	28	34	20	32	20	7.7	4.0	32	108	85	39	50
5	61	28	96	29	e14	7.2	4.1	28	107	91	36	64
6	87	26	50	25	e9.7	7.3	4.0	24	105	111	32	62
7	97	25	30	24	e9.5	9.1	4.7	35	107	105	29	71
8	88	22	25	26	e8.5	7.7	4.5	35	104	96	28	77
9	84	21	23	21	e7.9	8.5	4.7	30	104	99	28	52
10	71	21	21	20	e7.5	12	5.7	27	112	92	26	36
11	102	26	20	18	e7.3	25	8.0	34	104	86	24	30
12	109	28	19	17	e6.9	18	7.3	38	101	82	24	38
13	104	23	e18	16	e6.7	13	6.3	54	105	90	23	106
14	90	21	e17	15	e6.5	11	6.1	48	100	87	22	85
15	86	20	e16	15	e6.4	9.9	7.6	60	98	84	21	70
16	72	21	e16	15	e6.3	9.8	11	62	96	80	20	97
17	56	26	e15	25	e6.2	9.9	16	62	96	68	20	84
18	42	20	e15	22	e6.1	10	20	52	99	63	19	78
19	36	20	e14	19	e6.0	7.8	23	44	106	68	20	66
20	37	33	e14	17	e6.0	e7.0	22	47	132	74	23	72
21	37	74	e13	16	e5.9	e6.0	25	57	118	74	24	63
22	66	100	e13	17	e5.9	e5.5	28	96	100	85	21	78
23	67	85	e12	19	e5.8	e5.0	30	91	101	72	21	77
24	41	59	e12	17	e5.8	4.6	30	73	97	73	21	73
25	33	35	e12	16	7.0	5.7	26	63	90	72	22	76
26	30	30	e11	16	7.7	6.5	30	66	89	71	28	59
27	27	26	e10	21	32	5.2	54	80	98	61	89	48
28	25	24	11	20	17	4.6	42	89	104	48	38	47
29	23	22	13	16	---	4.4	34	96	93	59	37	56
30	23	21	23	15	---	4.3	32	99	87	59	31	122
31	24	---	19	22	---	4.2	---	129	---	44	33	---
TOTAL	1740	1008	651	682	315.6	265.6	501.8	1749	3097	2428	910	2048
MEAN	56.1	33.6	21.0	22.0	11.3	8.57	16.7	56.4	103	78.3	29.4	68.3
MAX	109	100	96	86	32	25	54	129	132	111	89	122
MIN	23	20	10	15	5.8	4.2	3.8	24	87	44	19	30
AC-FT	3450	2000	1290	1350	626	527	995	3470	6140	4820	1800	4060
CFSM	6.51	3.90	2.44	2.55	1.31	.99	1.94	6.55	12.0	9.09	3.41	7.92
IN.	7.51	4.35	2.81	2.94	1.36	1.15	2.17	7.55	13.37	10.48	3.93	8.84

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2001, BY WATER YEAR (WY)#

	MEAN	61.3	30.5	26.2	15.1	13.9	12.2	30.7	80.3	88.9	56.6	40.4	60.7
	MAX	97.9	49.5	65.7	22.3	36.9	27.2	49.6	107	147	90.5	69.7	95.0
	(WY)	1999	1994	1990	1991	1992	1992	1994	1992	1992	2000	1991	1991
	MIN	34.7	14.6	8.27	5.50	3.42	5.43	16.7	56.4	59.5	31.5	18.7	33.3
	(WY)	1994	1991	1997	1997	1999	1997	2001	2001	1998	1998	1994	1995

See period of record
e Estimated

15101490 GREENS CREEK AT GREENS CREEK MINE NEAR JUNEAU--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1989 - 2001#	
ANNUAL TOTAL	17348.2		15396.0			
ANNUAL MEAN	47.4		42.2		43.3	
HIGHEST ANNUAL MEAN					60.1 1992	
LOWEST ANNUAL MEAN					31.8 1998	
HIGHEST DAILY MEAN	133	Sep 16	132	Jun 20	465	Oct 20 1998
LOWEST DAILY MEAN	5.0	Mar 9	a3.8	Apr 2	b1.9	Mar 22 1991
ANNUAL SEVEN-DAY MINIMUM	5.2	Mar 4	4.0	Mar 31	1.9	Mar 21 1991
MAXIMUM PEAK FLOW			161	Oct 12	c710	Oct 20 1998
MAXIMUM PEAK STAGE			2.63	Oct 12	d14.79	Oct 20 1998
ANNUAL RUNOFF (AC-FT)	34410		30540		31350	
ANNUAL RUNOFF (CFSM)	5.50		4.89		5.02	
ANNUAL RUNOFF (INCHES)	74.87		66.44		68.22	
10 PERCENT EXCEEDS	98		97		91	
50 PERCENT EXCEEDS	33		28		32	
90 PERCENT EXCEEDS	8.8		7.0		6.7	

See Period of Record

a Apr. 2 and 3

b Mar. 22 to Mar. 27, 1991

c From rating curve extended above 140 ft³/s on basis of slope area measurement of peak flow

d Same site, different datum

15102200 FAVORITE CREEK NEAR ANGOON

LOCATION.--Lat 57°26'52", long 134°27'35", in SE¹/₄ NE¹/₄ SW¹/₄ sec. 14, T. 51 S., R. 68 E. (Sitka B-2 quad), Hydrologic Unit 19010204, in Tongass National Forest, on Admiralty Island, on right bank 1.2 mi upstream from confluence with North Fork Favorite Creek, 2.2 miles from the mouth of Favorite Creek and about 5.7 mi south east of Angoon.

DRAINAGE AREA.--2.52 mi²

PERIOD OF RECORD.--November 2000 to September 2001.

GAGE.--Water-stage recorder. Elevation of gage is 370 ft above sea level, from topographic map.

REMARKS.-- Records fair, except for discharges above 53 ft³/s, and estimated daily discharges, which are poor.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during the period November through September, 244 ft³/s, gage height 11.16 ft, December 1; minimum daily about 2.2 ft³/s, March 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	69	16	23	5.5	e2.7	14	42	21	8.8	21
2	---	---	35	45	44	4.4	e2.4	16	32	21	8.9	32
3	---	---	23	82	22	3.7	e2.3	22	27	19	8.1	25
4	---	---	19	29	14	3.3	e3.4	12	31	24	7.4	17
5	---	---	95	31	11	3.5	e3.1	9.6	36	23	6.9	17
6	---	---	32	17	9.6	12	2.8	8.1	34	30	6.5	15
7	---	---	22	35	8.5	20	2.6	32	36	30	6.1	12
8	---	---	18	33	7.6	6.9	2.5	29	35	26	5.9	11
9	---	---	14	29	6.7	5.6	2.7	14	32	30	5.8	9.0
10	---	---	12	15	6.0	9.7	2.7	11	34	25	5.5	7.7
11	---	---	11	12	5.4	19	3.4	12	28	20	5.1	6.7
12	---	---	9.3	9.7	5.1	8.4	5.4	13	26	19	4.8	6.3
13	---	---	8.1	7.5	6.1	5.7	3.7	15	27	24	4.5	7.9
14	---	---	6.7	7.1	5.3	4.7	3.4	15	29	21	4.3	7.5
15	---	---	6.2	9.1	4.6	4.5	3.4	18	27	20	4.3	9.7
16	---	---	5.7	8.8	4.1	4.6	3.6	26	26	19	4.2	12
17	---	---	5.6	43	3.8	4.6	4.5	25	26	16	4.2	12
18	---	---	13	22	3.6	e4.0	7.5	19	26	15	4.4	13
19	---	---	6.7	26	3.4	e3.2	5.8	16	31	16	4.3	12
20	---	---	5.4	14	3.3	e2.8	5.8	18	55	17	5.6	14
21	---	---	4.7	17	3.2	e2.5	6.4	19	43	16	5.9	13
22	---	---	4.3	29	3.1	e2.4	10	25	32	15	5.7	15
23	---	---	3.9	24	3.0	e2.2	18	24	28	14	5.3	16
24	---	---	4.3	14	2.8	e2.4	21	20	27	12	5.0	21
25	---	---	9.6	11	2.7	e2.5	11	17	24	11	5.2	28
26	---	---	6.1	9.5	7.1	e3.2	20	17	21	9.8	8.1	20
27	---	---	4.3	35	72	e3.1	29	17	21	9.5	31	18
28	---	14	4.1	17	9.9	e3.0	16	19	28	9.3	13	16
29	---	11	6.9	11	---	e2.9	23	23	25	9.0	12	28
30	---	9.8	22	9.1	---	e2.8	26	24	21	9.0	11	36
31	---	---	11	29	---	e3.5	---	43	---	8.4	12	---
TOTAL	---	---	497.9	696.8	300.9	166.6	254.1	592.7	910	559.0	229.8	478.8
MEAN	---	---	16.1	22.5	10.7	5.37	8.47	19.1	30.3	18.0	7.41	16.0
MAX	---	---	95	82	72	20	29	43	55	30	31	36
MIN	---	---	3.9	7.1	2.7	2.2	2.3	8.1	21	8.4	4.2	6.3
MED	---	---	9.3	17	5.7	3.7	4.1	18	28	19	5.8	14
AC-FT	---	---	988	1380	597	330	504	1180	1800	1110	456	950
CFSM	---	---	6.37	8.92	4.26	2.13	3.36	7.59	12.0	7.16	2.94	6.33
IN.	---	---	7.35	10.29	4.44	2.46	3.75	8.75	13.43	8.25	3.39	7.07

e Estimated

15106920 KADASHAN RIVER ABOVE HOOK CREEK NEAR TENAKEE

LOCATION.--Lat 57°39'46", long 135°11'06", in NW¹/₄ SE¹/₄ sec. 34, T. 48 S., R. 63 E. (Sitka C-4 quad), Greater Sitka Borough, Hydrologic Unit 19010203, on Chichagof Island, in Tongass National Forest, on right bank 0.6 mi upstream from Hook Creek, 3.5 mi upstream from mouth at Kadashan Bay, and 9 mi south of Tenakee.

DRAINAGE AREA.--10.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1968 to September 1978, October 1980 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 100 ft above sea level, from topographic map. Prior to October 24, 1969, at site 90 ft downstream at different datum; October 24, 1969 to September 30, 1978, at site 75 ft downstream at datum 1.89 ft higher.

REMARKS.--Records fair, except for estimated daily discharges, which are poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s and maximum (*)

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Oct. 11	0145	619	3.84	Jan. 3	1030	695	3.99
Dec. 5	0730	732	4.06	Sept. 13	0045	*1200	*4.82

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	68	106	83	115	39	19	62	99	23	14	90
2	35	59	70	150	93	30	16	74	66	25	13	130
3	39	139	47	439	67	25	15	111	61	25	12	53
4	33	57	55	155	46	22	27	74	84	23	14	36
5	105	42	440	112	37	21	23	48	78	27	12	142
6	226	43	120	119	31	43	20	38	65	81	12	112
7	181	77	66	78	29	75	17	64	66	87	12	66
8	89	50	51	76	27	49	21	162	62	55	11	50
9	138	38	41	75	24	77	26	108	66	59	10	34
10	112	33	36	46	22	187	20	55	80	45	9.8	28
11	256	86	32	36	36	243	22	62	54	32	9.5	24
12	198	83	29	32	20	116	40	70	50	35	9.3	184
13	113	46	24	32	68	58	25	70	67	65	9.1	723
14	82	38	e19	45	37	43	24	63	58	36	8.8	190
15	124	51	e17	65	e19	40	22	72	47	29	8.6	104
16	76	57	e18	51	e17	42	22	65	46	26	8.6	130
17	60	113	e18	98	e16	40	29	64	47	22	8.5	104
18	52	46	44	78	e15	34	42	70	49	20	9.4	86
19	50	42	37	57	e14	24	47	64	53	19	11	89
20	65	72	25	43	e14	e20	38	60	82	17	22	71
21	77	144	21	53	16	e17	40	87	51	16	34	55
22	151	198	24	83	16	e16	39	102	40	16	20	74
23	168	152	18	76	15	e14	52	84	39	15	16	64
24	74	123	18	43	e14	e16	83	61	37	15	13	53
25	52	88	32	34	14	17	52	49	33	14	13	56
26	44	95	30	32	49	25	52	49	31	14	31	43
27	39	86	23	85	278	23	79	60	32	13	129	41
28	35	55	27	64	63	22	58	67	33	13	39	42
29	31	43	51	38	---	21	72	77	28	13	38	103
30	62	38	111	32	---	20	69	67	24	13	46	240
31	143	---	91	186	---	28	---	149	---	12	39	---
TOTAL	2956	2262	1741	2596	1212	1447	1111	2308	1628	905	642.6	3217
MEAN	95.4	75.4	56.2	83.7	43.3	46.7	37.0	74.5	54.3	29.2	20.7	107
MAX	256	198	440	439	278	243	83	162	99	87	129	723
MIN	31	33	17	32	14	14	15	38	24	12	8.5	24
AC-FT	5860	4490	3450	5150	2400	2870	2200	4580	3230	1800	1270	6380
CFSM	9.35	7.39	5.51	8.21	4.24	4.58	3.63	7.30	5.32	2.86	2.03	10.5
IN.	10.78	8.25	6.35	9.47	4.42	5.28	4.05	8.42	5.94	3.30	2.34	11.73

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2001, BY WATER YEAR (WY)#

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001		
MEAN	118	77.3	64.3	50.0	48.6	44.9	67.9	102	66.9	31.0	32.6	75.4																								
MAX	234	152	147	147	118	129	118	182	151	60.2	79.0	141																								
(WY)	1975	1975	2000	1985	1985	1994	1994	1972	1972	1970	1983	1981																								
MIN	50.6	17.7	8.05	6.15	5.95	9.21	28.2	42.0	19.8	6.41	9.44	17.5																								
(WY)	1970	1974	1978	1969	1969	1974	1972	1981	1998	1989	1977	1986																								

See Period of Record; partial years used in monthly summary statistics
e Estimated

15106920 KADASHAN RIVER ABOVE HOOK CREEK NEAR TENAKEE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1968 - 2001#	
ANNUAL TOTAL	22409		22025.6			
ANNUAL MEAN	61.2		60.3		64.8	
HIGHEST ANNUAL MEAN					80.8	
LOWEST ANNUAL MEAN					44.1	
HIGHEST DAILY MEAN	511	Sep 16	723	Sep 13	1010	Oct 19 1998
LOWEST DAILY MEAN	14	Jan 24	8.5	Aug 17	a3.2	Jul 28 1989
ANNUAL SEVEN-DAY MINIMUM	15	Feb 12	8.9	Aug 12	4.2	Jan 13 1974
MAXIMUM PEAK FLOW			b1200	Sep 13	b1970	Oct 8 1990
MAXIMUM PEAK STAGE			4.82	Sep 13	5.83	Oct 8 1990
INSTANTANEOUS LOW FLOW			7.7	Aug 17	3.2	Jul 28 1989
ANNUAL RUNOFF (AC-FT)	44450		43690		46970	
ANNUAL RUNOFF (CFSM)	6.00		5.92		6.36	
ANNUAL RUNOFF (INCHES)	81.73		80.33		86.36	
10 PERCENT EXCEEDS	110		114		141	
50 PERCENT EXCEEDS	50		46		43	
90 PERCENT EXCEEDS	19		15		12	

See Period of Record; partial years used in monthly summary statistics

a Jul. 28 to Jul. 29, 1989

b From rating curve extended above 330 ft³/s on basis of area-velocity study at gage height 4.8 ft and shape of previous rating

15106920 KADASHAN RIVER ABOVE HOOK CREEK NEAR TENAKEE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967-72, 1974-77, 1981-1985, and 1987 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: November 1967 to September 1978, December 1981 to December 1984, March 1987 to March 1988, and September 1988 to current year.

INSTRUMENTATION.--Digital water-temperature recorder, November 1967 to December 1984, set for 1-hour punch interval.

Electronic water-temperature recorder since March 13, 1987, set for 2-hour recording interval. Electronic water-temperature recorder with 15-minute recording interval since July 11, 1996.

REMARKS.--Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on April 6. No variation was found in the temperature cross section. No variation was found between mean stream temperature and sensor temperature.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 16.5°C, July 15, 1993; minimum, 0.0°C, on many days during most winters.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 13.0°C, August 14 and 15; minimum, 0.0°C, on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	STREAM WIDTH (FT) (000004)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (000009)	GAGE HEIGHT (FEET) (000065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (000061)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (000020)
APR							
06...	1457	25.8	24.1	1.50	19	2.0	4.5
06...	1458	25.8	20.1	1.50	19	2.0	4.5
06...	1459	25.8	16.1	1.50	19	2.0	4.5
06...	1500	25.8	12.1	1.50	19	2.0	4.5
06...	1501	25.8	8.10	1.50	19	2.0	4.5
06...	1502	25.8	4.10	1.50	19	2.0	4.5

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	5.5	4.0	4.5	4.5	3.5	4.0	3.0	2.5	2.5	2.0	1.5	1.5
2	4.5	4.0	4.0	5.0	4.5	4.5	3.5	3.0	3.0	2.0	1.0	1.5
3	4.5	3.5	4.0	5.0	4.5	5.0	3.5	3.0	3.0	2.0	1.5	1.5
4	4.5	3.5	4.0	4.5	3.0	4.0	3.5	3.0	3.5	2.5	2.0	2.0
5	6.5	4.5	5.5	4.0	3.0	3.5	4.0	3.0	3.5	2.5	1.5	2.0
6	7.5	6.5	7.0	4.0	4.0	4.0	4.0	3.0	3.5	2.5	2.0	2.0
7	7.5	6.5	7.0	4.5	4.0	4.0	3.0	3.0	3.0	3.0	2.5	3.0
8	6.5	6.0	6.0	4.5	4.0	4.0	3.0	2.0	2.5	3.0	2.5	2.5
9	6.5	6.5	6.5	4.0	3.0	3.5	2.0	1.5	1.5	2.5	2.0	2.0
10	6.5	6.0	6.0	3.5	3.0	3.5	2.0	1.5	2.0	2.0	1.5	1.5
11	7.0	6.0	6.5	4.5	3.5	4.0	2.0	2.0	2.0	2.0	1.5	2.0
12	8.0	7.0	7.5	4.5	4.5	4.5	2.0	1.0	2.0	1.5	1.0	1.5
13	7.5	6.5	7.0	4.5	3.5	4.0	1.0	.0	.5	2.0	1.5	1.5
14	6.5	6.0	6.5	4.5	4.0	4.0	.0	.0	.0	2.0	1.5	2.0
15	6.5	6.0	6.5	4.5	3.5	4.0	.0	.0	.0	2.0	1.5	2.0
16	6.5	6.0	6.0	4.0	3.5	4.0	.0	.0	.0	2.5	2.0	2.0
17	6.5	5.5	6.0	4.0	4.0	4.0	1.0	.0	.5	2.5	2.0	2.5
18	5.5	5.0	5.5	4.0	3.0	3.5	1.0	.0	.5	3.0	2.5	2.5
19	6.0	5.5	5.5	4.0	3.5	3.5	1.0	.5	1.0	3.0	2.5	2.5
20	6.0	5.5	5.5	5.0	4.0	4.5	1.0	.5	1.0	3.0	2.5	2.5
21	5.5	5.0	5.0	5.0	5.0	5.0	1.0	.0	.5	3.0	2.5	2.5
22	6.0	5.0	5.5	5.5	5.0	5.0	.5	.0	.0	2.5	2.5	2.5
23	6.0	5.5	6.0	5.0	4.0	4.0	1.0	.5	1.0	2.5	2.0	2.5
24	5.5	5.0	5.5	4.0	4.0	4.0	1.5	1.0	1.5	2.5	2.0	2.0
25	5.5	5.0	5.5	4.0	4.0	4.0	1.5	1.0	1.5	2.5	2.0	2.5
26	5.5	4.5	5.0	4.0	3.5	4.0	1.5	1.0	1.0	3.0	2.5	2.5
27	5.0	4.5	4.5	4.0	3.0	3.5	1.5	1.5	1.5	3.0	2.5	2.5
28	4.5	4.0	4.5	3.0	2.5	3.0	1.5	1.5	1.5	2.5	1.5	2.0
29	4.0	2.5	3.0	2.5	2.5	2.5	1.5	.5	1.0	2.0	1.5	2.0
30	3.5	2.5	3.0	3.0	2.5	2.5	1.5	.5	1.0	2.0	1.5	2.0
31	4.0	3.5	4.0	---	---	---	1.5	1.0	1.5	1.5	1.5	1.5
MONTH	8.0	2.5	5.4	5.5	2.5	3.9	4.0	.0	1.5	3.0	1.0	2.1

15106920 KADASHAN RIVER ABOVE HOOK CREEK NEAR TENAKEE--Continued

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	2.5	1.5	2.0	1.5	1.0	1.0	2.0	.5	1.0	4.5	2.5	3.5
2	2.5	2.0	2.5	2.0	1.0	1.5	2.0	.5	1.5	3.5	3.0	3.5
3	2.5	2.0	2.5	1.5	1.0	1.5	2.0	1.0	1.5	4.0	2.5	3.5
4	2.0	1.5	1.5	1.5	.5	1.0	1.5	1.0	1.0	4.0	3.0	3.5
5	2.0	1.0	1.5	1.5	1.0	1.5	2.0	1.0	1.5	4.0	2.5	3.5
6	1.5	1.0	1.5	1.5	1.0	1.5	2.0	1.0	1.5	4.0	2.5	3.5
7	2.0	1.5	1.5	1.5	1.0	1.0	2.5	1.0	1.5	4.0	3.5	3.5
8	2.0	1.0	1.5	2.0	1.0	1.5	2.0	1.0	1.5	3.5	3.0	3.5
9	1.0	.5	1.0	1.5	1.5	1.5	2.5	1.0	1.5	4.5	3.0	3.5
10	.5	.0	.5	1.5	1.0	1.0	2.5	1.0	1.5	4.5	3.0	4.0
11	.5	.0	.0	1.5	1.0	1.5	2.5	1.5	2.0	5.0	4.0	4.5
12	1.0	.5	1.0	2.0	1.0	2.0	2.5	1.0	1.5	5.5	3.5	4.5
13	1.0	.0	.5	3.0	1.5	2.5	2.5	1.0	2.0	5.5	4.0	4.5
14	.5	.0	.0	3.0	2.0	2.5	3.5	2.0	2.5	5.5	4.0	4.5
15	.0	.0	.0	3.0	2.5	3.0	3.0	1.5	2.5	5.5	3.5	4.5
16	.0	.0	.0	3.0	2.0	2.5	3.5	1.5	2.5	5.0	3.5	4.5
17	.0	.0	.0	2.5	2.0	2.0	3.0	2.0	2.5	5.5	3.5	4.5
18	.0	.0	.0	2.0	1.0	2.0	3.5	2.0	2.5	5.0	4.0	4.5
19	.0	.0	.0	1.0	.0	.5	3.5	2.0	2.5	5.5	3.5	4.5
20	.5	.0	.0	.0	.0	.0	3.5	1.5	2.5	4.5	3.5	4.0
21	1.0	.5	1.0	.0	.0	.0	4.0	2.0	3.0	5.5	4.0	4.5
22	1.0	.5	1.0	.5	.0	.0	3.5	2.0	3.0	5.5	4.0	4.5
23	.5	.0	.5	.0	.0	.0	3.5	2.5	3.0	5.0	4.0	4.5
24	.5	.0	.0	1.0	.0	.0	3.5	2.5	3.0	5.5	3.5	4.5
25	1.0	.0	.5	1.5	.5	1.0	4.5	2.5	3.5	5.5	3.5	4.5
26	1.0	.0	.5	1.5	1.0	1.0	3.5	3.0	3.5	6.5	3.5	5.0
27	.5	.0	.0	1.5	1.0	1.0	4.0	3.0	3.5	6.0	5.0	5.5
28	1.0	.5	1.0	1.0	.5	1.0	4.0	2.5	3.5	6.5	4.0	5.0
29	---	---	---	2.0	.5	1.0	4.0	3.0	3.5	5.0	4.0	4.5
30	---	---	---	1.0	1.0	1.0	4.5	3.0	3.5	5.0	4.0	4.5
31	---	---	---	1.5	.5	1.0	---	---	---	5.5	4.5	5.0
MONTH	2.5	.0	.8	3.0	.0	1.2	4.5	.5	2.3	6.5	2.5	4.3

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	6.0	4.0	5.0	9.5	8.0	9.0	10.5	10.0	10.0	10.0	9.5	9.5
2	5.5	4.5	5.0	10.0	8.5	9.0	11.5	10.0	10.5	9.5	9.0	9.5
3	6.0	4.5	5.0	10.5	9.0	9.5	11.5	10.5	11.0	9.5	8.5	9.0
4	6.0	4.5	5.0	9.5	9.0	9.0	11.5	10.5	11.0	9.5	8.5	9.0
5	6.5	4.5	5.5	9.0	8.5	8.5	12.0	10.5	11.0	10.0	9.0	9.5
6	6.5	5.0	5.5	9.0	8.5	8.5	11.5	10.0	11.0	9.5	9.0	9.0
7	6.5	5.0	6.0	9.0	8.0	8.5	12.0	10.5	11.0	9.5	8.5	9.0
8	7.5	5.0	6.0	8.5	8.0	8.0	12.0	10.0	11.0	9.0	8.5	8.5
9	7.0	5.5	6.5	9.0	8.0	8.5	12.0	9.5	11.0	8.5	7.5	8.0
10	6.0	5.5	5.5	9.0	8.0	8.5	12.0	9.5	11.0	8.0	6.5	7.5
11	6.0	5.0	5.5	9.0	8.0	8.5	11.5	10.5	11.0	8.0	7.0	7.5
12	6.5	5.5	6.0	8.5	8.0	8.0	12.5	10.0	11.0	9.0	8.0	8.5
13	6.5	5.5	6.0	9.0	8.5	8.5	12.5	10.0	11.0	9.5	9.0	9.5
14	7.5	5.5	6.5	9.0	8.0	8.5	13.0	10.5	11.5	9.5	9.0	9.0
15	7.0	5.5	6.0	10.0	8.5	9.0	13.0	11.0	12.0	9.5	8.5	9.0
16	7.5	6.0	7.0	9.5	9.0	9.5	12.5	10.0	11.5	9.5	9.5	9.5
17	7.5	6.5	7.0	10.5	8.5	9.5	11.5	11.0	11.5	10.0	9.0	9.5
18	8.5	6.5	7.5	10.5	9.5	10.0	11.5	11.0	11.5	9.5	9.0	9.0
19	7.5	7.0	7.0	12.0	9.5	10.5	11.5	11.0	11.0	9.0	8.5	9.0
20	8.0	6.5	7.0	12.5	10.0	11.0	11.0	10.5	11.0	9.0	8.5	8.5
21	7.5	6.5	7.0	12.5	10.0	11.5	11.5	10.5	11.0	8.5	8.0	8.5
22	7.5	6.5	7.0	12.0	11.0	11.5	11.0	10.0	10.5	8.5	8.0	8.5
23	7.5	7.0	7.0	11.0	10.0	10.5	10.5	10.0	10.5	8.5	7.5	8.0
24	9.0	6.5	7.5	10.5	10.0	10.0	10.5	10.0	10.5	8.0	8.0	8.0
25	8.0	6.0	7.0	10.5	10.0	10.0	11.0	10.0	10.5	8.0	7.5	8.0
26	9.0	6.5	8.0	10.5	10.0	10.0	11.0	10.0	10.5	8.0	7.0	7.5
27	10.0	7.5	9.0	10.5	10.0	10.0	11.0	10.5	10.5	8.0	7.5	7.5
28	9.5	8.5	9.0	10.5	9.5	10.0	10.5	10.0	10.5	8.0	7.5	7.5
29	9.0	7.5	8.5	11.5	10.0	10.5	10.5	10.0	10.0	8.0	7.0	7.5
30	10.0	8.0	9.0	10.5	10.0	10.5	11.0	10.0	10.5	8.0	7.5	8.0
31	---	---	---	10.5	10.0	10.0	10.5	9.5	10.0	---	---	---
MONTH	10.0	4.0	6.7	12.5	8.0	9.5	13.0	9.5	10.9	10.0	6.5	8.6

15106970 MIDDLE BASIN CREEK NEAR TENAKEE

LOCATION.--Lat 57°41'33", long 135°12'06", in NE¹/₄ NE¹/₄ SE¹/₄ sec. 21, T. 48 S., R. 63 E. (Sitka C-4 quad), Hydrologic Unit 19010203, in Tongass National Forest, on Chichagof Island, on left bank 0.3 mi upstream from confluence with Kadashan River, and about 7 mi south of Tenakee.

DRAINAGE AREA.--0.12 mi²

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1981 to July 1987(unpublished fragmentary records provided by the U.S. Forest Service). July 1999 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 190 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.60	.75	.98	.58	.92	.61	.30	.33	.93	.47	.25	.27
2	.56	.75	.84	.78	.90	.54	.27	.36	1.0	.47	.24	.39
3	.55	.80	.74	2.2	.83	.48	.28	.45	1.0	.47	.24	.29
4	.52	.71	.77	1.8	.77	.44	.31	.45	.99	.44	.25	.24
5	.58	.72	2.5	2.1	.71	.43	.32	.40	.99	.42	.23	.36
6	.92	.72	1.9	1.7	.65	.47	.30	.39	.98	.46	.21	.34
7	1.0	.71	1.8	1.2	.61	.52	.28	.43	.96	.45	.20	.31
8	1.1	.64	1.3	1.0	.57	.45	.28	.58	.98	.41	.20	.29
9	1.3	.60	1.1	.98	.53	.45	.29	.59	1.0	.40	.19	.28
10	1.2	.58	.95	.79	.49	.76	.26	.50	1.0	.38	.19	.28
11	2.1	.66	.86	.70	.44	1.2	.28	.49	1.1	.36	.20	.28
12	2.6	.64	.80	.65	.44	.99	.30	.49	1.0	.36	.19	.51
13	2.4	.57	.74	.63	.62	.71	.25	.48	.97	.39	.19	2.1
14	2.1	.56	.65	.65	.45	.63	.24	.48	.93	.36	.19	2.3
15	1.9	.56	.58	.65	.40	.62	.23	.48	.88	.35	.19	1.9
16	1.5	.57	.59	.59	.39	.61	.24	.48	.85	.35	.18	1.6
17	1.2	.69	.56	.69	.38	.58	.25	.48	.81	.34	.18	1.2
18	1.1	.57	.72	.64	.38	.53	.26	.50	.79	.33	.17	1.0
19	.97	.57	.59	.59	.37	.44	.25	.48	.78	.32	.17	.92
20	.97	.61	.53	.58	.36	.37	.24	.48	.80	.32	.22	.85
21	.92	.71	.50	.56	.36	.35	.24	.51	.84	.32	.24	.81
22	1.0	1.0	.46	.60	.35	.34	.25	.52	.82	.30	.19	.76
23	1.4	1.7	.44	.62	.33	.33	.27	.53	.75	.28	.18	.69
24	1.2	1.6	.44	.56	.33	.36	.30	.54	.67	.27	.17	.67
25	1.1	1.5	.50	.53	.32	.38	.27	.54	.61	.26	.17	.63
26	1.0	1.3	.45	.51	.44	.37	.27	.56	.59	.27	.21	.58
27	.93	1.2	.41	.65	1.9	.37	.29	.58	.57	.26	.35	.54
28	.85	1.0	.44	.60	.75	.36	.29	.59	.54	.25	.21	.53
29	.75	.94	.49	.54	---	.33	.36	.60	.49	.25	.20	.58
30	.81	.86	.59	.51	---	.34	.35	.64	.49	.24	.21	.72
31	.90	---	.57	1.0	---	.36	---	.77	---	.25	.21	---
TOTAL	36.03	24.79	24.79	26.18	15.99	15.72	8.32	15.70	25.11	10.80	6.42	22.22
MEAN	1.16	.83	.80	.84	.57	.51	.28	.51	.84	.35	.21	.74
MAX	2.6	1.7	2.5	2.2	1.9	1.2	.36	.77	1.1	.47	.35	2.3
MIN	.52	.56	.41	.51	.32	.33	.23	.33	.49	.24	.17	.24
MED	1.0	.71	.59	.65	.44	.45	.28	.49	.87	.35	.20	.58
AC-FT	.71	.49	.49	.52	.32	.31	.17	.31	.50	.21	.13	.44
CFSM	9.69	6.89	6.66	7.04	4.76	4.23	2.31	4.22	6.98	2.90	1.73	6.17
IN.	11.17	7.68	7.68	8.12	4.96	4.87	2.58	4.87	7.78	3.35	1.99	6.89

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)#

	2000	2000	2000	2001	2001	2001	2000	2000	2001	1999	1999	2000
MEAN	2.07	1.74	2.28	.66	.43	.45	.35	.56	.79	.45	.30	1.03
MAX	2.98	2.65	3.75	.84	.57	.51	.43	.61	.84	.65	.38	1.34
(WY)	2000	2000	2000	2001	2001	2001	2000	2000	2001	1999	1999	2000
MIN	1.16	.83	.80	.47	.30	.40	.28	.51	.74	.35	.21	.74
(WY)	2001	2001	2001	2000	2000	2000	2001	2001	2000	2001	2001	2001

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1999 - 2001#

ANNUAL TOTAL	236.31	232.07	
ANNUAL MEAN	.65	.64	.92
HIGHEST ANNUAL MEAN			1.20
LOWEST ANNUAL MEAN			.64
HIGHEST DAILY MEAN	7.8 Sep 17	2.6 Oct 12	31 Dec 27 1999
LOWEST DAILY MEAN	.23 Mar 12	.17 Aug 18	.17 Aug 18 2001
ANNUAL SEVEN-DAY MINIMUM	.25 Mar 8	.18 Aug 13	.18 Aug 13 2001
MAXIMUM PEAK FLOW		4.1 Feb 27	a66 Dec 27 1999
MAXIMUM PEAK STAGE		4.29 Feb 27	5.16 Dec 27 1999
INSTANTANEOUS LOW FLOW		b.15 Aug 16	b.15 Aug 16 2001
ANNUAL RUNOFF (AC-FT)	469	460	665
ANNUAL RUNOFF (CFSM)	5.38	5.30	7.65
ANNUAL RUNOFF (INCHES)	73.26	71.94	103.93
10 PERCENT EXCEEDS	1.0	1.1	1.2
50 PERCENT EXCEEDS	.51	.54	.52
90 PERCENT EXCEEDS	.29	.25	.27

See Period of Record; partial years used in monthly statistics

a From rating curve extended above 3.0 ft³/s

b Aug. 16 and 25, 2001

15106970 MIDDLE BASIN CREEK NEAR TENAKEE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1981 to July 1987 (unpublished fragmentary records provided by the U.S. Forest Service),
July 2000 to September 2001.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: July 2000 to September 2001

INSTRUMENTATION.--Electronic water-temperature recorder with 15-minute recording interval since July 9, 2000.

REMARKS.--Records represent water temperature at the sensor within 0.5°C.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 9.0°C, August 4 and 5, 2000 and August 13-16, 20 and 27, 2001; minimum, 0.5°C, on
several days during winter.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 9.0°C, August 13-16, 20 and 27; minimum, 0.5°C, on several days during winter.

TEMPERATURE, WATER, (DEGREES CELSIUS), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	---	---	---	8.0	8.0	8.0	8.0	7.5	7.5
2	---	---	---	---	---	---	8.5	7.5	8.0	7.5	6.5	7.5
3	---	---	---	---	---	---	8.5	8.0	8.0	7.5	6.5	7.0
4	---	---	---	---	---	---	9.0	8.0	8.5	8.0	7.5	8.0
5	---	---	---	---	---	---	9.0	8.5	8.5	8.0	8.0	8.0
6	---	---	---	---	---	---	8.5	8.0	8.0	8.5	8.0	8.0
7	---	---	---	---	---	---	8.5	8.0	8.5	8.0	7.5	8.0
8	---	---	---	---	---	---	8.5	8.0	8.0	7.5	7.0	7.5
9	---	---	---	---	---	---	8.5	8.0	8.0	7.5	7.0	7.5
10	---	---	---	7.5	7.5	7.5	8.5	8.0	8.0	7.5	7.0	7.0
11	---	---	---	7.5	7.0	7.5	8.5	7.5	8.0	7.5	7.0	7.5
12	---	---	---	7.5	7.0	7.5	8.5	8.0	8.0	7.5	7.0	7.5
13	---	---	---	7.5	7.0	7.5	8.5	8.0	8.0	7.5	7.0	7.0
14	---	---	---	7.5	7.0	7.5	8.5	8.0	8.0	7.5	7.0	7.0
15	---	---	---	8.0	7.5	7.5	8.5	8.5	8.5	7.0	7.0	7.0
16	---	---	---	8.0	7.5	7.5	8.5	8.0	8.5	7.0	7.0	7.0
17	---	---	---	7.5	7.5	7.5	8.5	8.0	8.5	7.0	6.5	6.5
18	---	---	---	7.5	7.5	7.5	8.5	7.5	8.0	6.5	6.0	6.5
19	---	---	---	8.0	7.5	7.5	8.0	8.0	8.0	6.0	6.0	6.0
20	---	---	---	8.0	7.5	7.5	8.5	8.0	8.5	6.0	5.5	6.0
21	---	---	---	8.0	7.5	7.5	8.5	8.0	8.5	6.0	5.5	5.5
22	---	---	---	8.0	7.5	8.0	8.5	8.5	8.5	6.5	6.0	6.5
23	---	---	---	8.0	7.5	8.0	8.5	8.0	8.0	7.0	6.5	6.5
24	---	---	---	8.0	7.5	8.0	8.0	8.0	8.0	7.0	6.5	7.0
25	---	---	---	8.0	7.5	8.0	8.5	8.0	8.0	7.0	6.5	7.0
26	---	---	---	8.0	7.5	8.0	8.0	8.0	8.0	7.0	6.5	7.0
27	---	---	---	8.0	7.5	8.0	8.0	7.5	8.0	7.0	6.5	7.0
28	---	---	---	8.0	8.0	8.0	8.0	8.0	8.0	7.0	7.0	7.0
29	---	---	---	8.0	8.0	8.0	8.0	7.5	8.0	7.0	6.0	6.5
30	---	---	---	8.0	8.0	8.0	8.0	7.5	8.0	6.0	5.5	6.0
31	---	---	---	8.5	8.0	8.0	8.0	7.5	7.5	---	---	---
MONTH	---	---	---	---	---	---	9.0	7.5	8.1	8.5	5.5	7.0

15106970 MIDDLE BASIN CREEK NEAR TENAKEE--Continued

TEMPERATURE, WATER, (DEGREES CELSIUS), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	5.5	5.0	5.0	4.5	4.5	4.5	4.0	3.5	4.0	3.0	3.0	3.0
2	5.5	5.0	5.0	5.0	4.5	5.0	4.0	4.0	4.0	3.5	3.0	3.0
3	5.0	4.5	5.0	5.0	5.0	5.0	4.0	4.0	4.0	3.5	3.5	3.5
4	5.0	4.5	5.0	5.0	4.0	4.5	4.0	3.5	4.0	3.5	3.0	3.5
5	6.0	5.0	5.5	4.5	4.0	4.5	4.5	3.5	4.0	3.5	3.0	3.0
6	6.5	6.0	6.0	4.5	4.5	4.5	4.5	4.0	4.0	3.5	3.0	3.5
7	6.5	6.0	6.5	4.5	4.5	4.5	4.0	3.5	4.0	4.0	3.5	3.5
8	6.0	5.5	6.0	4.5	4.5	4.5	3.5	3.0	3.5	4.0	3.5	3.5
9	6.0	6.0	6.0	4.5	4.0	4.0	3.0	2.5	2.5	3.5	3.0	3.0
10	6.0	5.5	5.5	4.0	4.0	4.0	3.0	2.5	3.0	3.0	2.5	3.0
11	6.0	6.0	6.0	4.5	4.0	4.5	3.0	2.5	3.0	3.0	2.5	2.5
12	6.5	6.0	6.0	5.0	4.5	4.5	3.0	2.0	2.5	2.5	2.5	2.5
13	6.0	5.5	6.0	4.5	4.0	4.5	2.0	1.5	2.0	2.5	2.5	2.5
14	5.5	5.5	5.5	4.5	4.5	4.5	1.5	1.0	1.0	3.0	2.5	2.5
15	5.5	5.5	5.5	4.5	4.0	4.5	1.5	1.0	1.0	3.0	2.5	3.0
16	5.5	5.5	5.5	4.5	4.0	4.5	1.5	.5	1.5	3.5	3.0	3.0
17	5.5	5.0	5.5	4.5	4.5	4.5	2.0	1.5	2.0	3.5	3.0	3.5
18	5.5	5.0	5.0	4.5	4.0	4.0	2.5	1.5	2.0	3.5	3.5	3.5
19	5.5	5.0	5.5	4.5	4.0	4.5	2.5	2.0	2.5	3.5	3.5	3.5
20	5.5	5.0	5.5	5.0	4.5	4.5	2.5	2.0	2.5	3.5	3.5	3.5
21	5.0	5.0	5.0	5.0	5.0	5.0	2.5	1.5	2.0	3.5	3.5	3.5
22	5.5	5.0	5.5	5.5	5.0	5.0	2.0	1.5	1.5	3.5	3.5	3.5
23	5.5	5.5	5.5	5.0	4.5	4.5	2.0	2.0	2.0	3.5	3.0	3.5
24	5.5	5.0	5.5	4.5	4.5	4.5	2.5	2.0	2.5	3.0	3.0	3.0
25	5.0	5.0	5.0	4.5	4.5	4.5	2.5	2.5	2.5	3.5	3.0	3.0
26	5.0	4.5	5.0	4.5	4.0	4.5	2.5	2.5	2.5	3.5	3.0	3.0
27	5.0	4.5	4.5	4.5	4.0	4.0	2.5	2.5	2.5	3.5	3.5	3.5
28	4.5	4.0	4.5	4.0	3.5	4.0	2.5	2.5	2.5	3.5	3.0	3.0
29	4.0	3.5	4.0	3.5	3.5	3.5	3.0	2.5	3.0	3.0	3.0	3.0
30	4.5	4.0	4.0	3.5	3.5	3.5	3.0	3.0	3.0	3.0	2.5	3.0
31	4.5	4.5	4.5	---	---	---	3.0	3.0	3.0	3.0	2.5	3.0
MONTH	6.5	3.5	5.3	5.5	3.5	4.4	4.5	.5	2.7	4.0	2.5	3.1
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	3.5	3.0	3.0	2.5	2.0	2.0	2.0	1.5	1.5	4.0	3.0	3.5
2	3.5	3.0	3.5	2.5	2.0	2.0	2.0	1.5	1.5	3.5	3.5	3.5
3	3.5	3.0	3.0	2.5	2.0	2.0	2.0	1.5	2.0	4.0	3.5	3.5
4	3.0	2.5	3.0	2.0	1.5	2.0	2.0	1.5	2.0	4.0	3.5	3.5
5	3.0	2.5	2.5	2.0	2.0	2.0	2.0	2.0	2.0	3.5	3.0	3.5
6	2.5	2.5	2.5	2.5	2.0	2.0	2.5	1.5	2.0	3.5	3.0	3.5
7	2.5	2.5	2.5	2.5	2.0	2.5	2.5	1.5	2.0	4.0	3.5	3.5
8	2.5	2.0	2.5	2.5	2.0	2.5	2.0	1.5	2.0	4.0	3.5	3.5
9	2.5	1.5	2.0	2.5	2.5	2.5	2.5	2.0	2.5	4.0	3.5	3.5
10	2.0	1.0	1.5	2.5	2.5	2.5	2.5	1.5	2.0	4.0	3.5	3.5
11	1.5	1.0	1.5	3.0	2.5	2.5	2.5	2.0	2.5	4.0	3.5	4.0
12	2.0	1.5	2.0	3.0	2.5	2.5	2.5	2.0	2.5	4.5	4.0	4.0
13	2.0	1.5	2.0	3.0	2.5	2.5	2.5	2.0	2.5	4.5	4.0	4.0
14	2.0	1.5	1.5	3.0	2.5	3.0	3.0	2.5	2.5	4.5	4.0	4.5
15	1.5	1.0	1.0	3.0	3.0	3.0	3.0	2.0	2.5	5.0	4.0	4.5
16	1.5	1.0	1.0	3.0	2.5	3.0	3.0	2.0	2.5	4.5	4.0	4.5
17	1.5	.5	1.0	3.0	2.5	3.0	3.0	2.5	3.0	5.0	4.0	4.5
18	1.5	.5	1.0	2.5	1.5	2.5	3.5	2.5	3.0	4.5	4.0	4.5
19	1.5	.5	1.0	1.5	1.0	1.5	3.5	3.0	3.0	5.0	4.0	4.5
20	1.5	1.0	1.5	1.0	.5	1.0	3.5	2.5	3.0	4.5	4.0	4.5
21	2.0	1.5	1.5	1.0	.5	.5	3.5	2.5	3.0	5.0	4.5	4.5
22	2.0	1.5	1.5	1.0	.5	1.0	3.5	2.5	3.0	5.0	4.5	4.5
23	1.5	1.0	1.5	1.0	.5	1.0	3.5	3.0	3.0	5.0	4.5	4.5
24	1.5	1.0	1.5	1.5	1.0	1.5	3.5	3.0	3.5	4.5	4.0	4.5
25	2.0	1.0	1.5	2.0	1.5	1.5	4.0	3.0	3.5	5.0	4.0	4.5
26	2.0	1.5	2.0	2.0	1.5	1.5	3.5	3.0	3.5	5.0	4.0	4.5
27	2.0	1.5	1.5	2.0	1.5	1.5	4.0	3.5	3.5	5.0	4.5	5.0
28	2.0	2.0	2.0	2.0	1.5	1.5	3.5	3.0	3.5	5.5	4.5	5.0
29	---	---	---	2.0	1.5	2.0	4.0	3.5	3.5	5.5	5.0	5.0
30	---	---	---	2.0	1.5	1.5	4.0	3.5	3.5	5.0	5.0	5.0
31	---	---	---	2.0	1.5	2.0	---	---	---	5.5	5.0	5.5
MONTH	3.5	.5	1.9	3.0	.5	2.0	4.0	1.5	2.7	5.5	3.0	4.2

15106970 MIDDLE BASIN CREEK NEAR TENAKEE--Continued

TEMPERATURE, WATER, (DEGREES CELSIUS), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	5.5	5.0	5.5	7.5	6.5	7.0	8.0	7.5	8.0	8.5	8.0	8.5
2	5.5	5.0	5.0	7.5	7.0	7.0	8.5	7.5	8.0	8.5	8.0	8.5
3	5.5	5.0	5.5	7.5	7.0	7.0	8.0	8.0	8.0	8.5	8.0	8.0
4	5.5	5.0	5.5	7.0	7.0	7.0	8.5	8.0	8.0	8.0	8.0	8.0
5	6.0	5.0	5.5	7.0	7.0	7.0	8.5	8.0	8.0	8.5	8.0	8.5
6	6.0	5.5	5.5	7.0	7.0	7.0	8.5	7.5	8.0	8.5	8.0	8.0
7	6.0	5.5	5.5	7.0	7.0	7.0	8.5	8.0	8.0	8.5	8.0	8.0
8	6.5	5.5	6.0	7.0	6.5	7.0	8.5	8.0	8.0	8.0	8.0	8.0
9	6.5	5.5	6.0	7.0	6.5	7.0	8.5	7.5	8.0	8.0	7.5	7.5
10	6.0	5.5	5.5	7.0	6.5	7.0	8.5	7.5	8.0	8.0	7.0	7.5
11	5.5	5.5	5.5	7.0	6.5	7.0	8.5	8.0	8.0	7.5	7.0	7.5
12	6.0	5.5	5.5	7.0	6.5	7.0	8.5	8.0	8.0	8.5	7.5	8.0
13	6.0	5.5	5.5	7.0	7.0	7.0	9.0	8.0	8.5	8.5	8.0	8.5
14	6.0	5.5	6.0	7.0	7.0	7.0	9.0	8.0	8.5	8.0	7.0	7.5
15	6.0	5.5	6.0	7.5	7.0	7.0	9.0	8.5	8.5	7.0	7.0	7.0
16	6.5	5.5	6.0	7.5	7.0	7.0	9.0	8.0	8.5	7.5	7.0	7.5
17	6.5	6.0	6.0	7.5	7.0	7.5	8.5	8.5	8.5	7.5	7.0	7.5
18	6.5	6.0	6.5	7.5	7.0	7.5	8.5	8.5	8.5	7.0	7.0	7.0
19	6.5	6.5	6.5	8.0	7.0	7.5	8.5	8.5	8.5	7.0	7.0	7.0
20	7.0	6.5	6.5	8.5	7.5	8.0	9.0	8.5	8.5	7.0	7.0	7.0
21	6.5	6.0	6.5	8.5	7.5	8.0	8.5	8.5	8.5	7.0	7.0	7.0
22	6.5	6.0	6.0	8.5	8.0	8.0	8.5	8.0	8.5	7.0	7.0	7.0
23	6.5	6.0	6.0	8.0	7.5	7.5	8.5	8.0	8.5	7.0	6.5	7.0
24	6.5	6.0	6.5	8.0	7.5	8.0	8.5	8.0	8.5	7.0	7.0	7.0
25	6.5	6.0	6.5	8.0	7.5	8.0	8.5	8.0	8.5	7.0	6.5	7.0
26	7.0	6.0	6.5	8.0	7.5	8.0	8.5	8.5	8.5	7.0	6.5	6.5
27	7.5	6.5	7.0	8.0	7.5	8.0	9.0	8.5	8.5	7.0	6.5	6.5
28	7.0	7.0	7.0	8.0	7.5	8.0	8.5	8.5	8.5	7.0	6.5	6.5
29	7.0	6.5	7.0	8.0	7.5	8.0	8.5	8.5	8.5	7.0	6.5	6.5
30	7.5	6.5	7.0	8.0	7.5	8.0	8.5	8.5	8.5	7.0	6.5	7.0
31	---	---	---	8.0	7.5	8.0	8.5	8.0	8.5	---	---	---
MONTH	7.5	5.0	6.1	8.5	6.5	7.4	9.0	7.5	8.3	8.5	6.5	7.4

15109048 PETERSON CREEK BELOW NORTH FORK NEAR AUKE BAY

LOCATION.(REVISED)--Lat 58°17'00", long 134°39'54", in SE¹/₄ NW¹/₄ sec. 29, T. 41 S., R. 66 E. (Juneau B-2 SW), Hydrologic Unit 19010301, City and Borough of Juneau, on Douglas Island, in Tongass National Forest, on left bank 100 ft downstream from North Fork Peterson Creek, 1.25 mi upstream from mouth, 7.2 mi south of Auke Bay, and 9.6 mi west of Douglas.

DRAINAGE AREA.--4.33 mi², revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1998 to current year.

REVISED RECORDS.--WDR AK-00-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 50 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	4.5	6.5	4.7	e10	13	3.2	5.9	26	6.4	3.9	e6.8
2	6.2	4.6	10	6.1	e9.5	8.4	3.1	5.5	22	6.3	3.5	16
3	6.9	14	8.4	35	e8.7	6.3	3.0	9.2	23	6.0	3.2	12
4	7.0	9.7	7.4	20	e8.0	5.1	3.6	15	22	5.9	3.2	e10
5	12	7.3	119	20	e7.6	4.5	3.5	12	18	6.6	3.3	e11
6	20	6.1	35	19	5.9	5.8	3.3	9.6	16	9.0	e3.4	e14
7	19	7.3	19	13	4.9	9.1	3.2	7.9	17	11	e3.2	e13
8	24	6.5	14	11	4.4	7.2	3.2	7.6	15	14	e3.3	e13
9	16	5.5	10	9.0	4.0	9.0	3.4	11	15	12	e2.9	e11
10	13	4.9	7.9	6.8	3.9	22	3.2	9.1	15	10	e2.8	e9.0
11	47	13	6.6	5.4	e3.8	34	3.2	7.8	13	8.7	e2.7	e6.6
12	38	24	5.7	4.7	e3.5	21	3.2	7.8	12	8.0	e2.6	e5.8
13	51	14	5.0	4.5	e3.4	13	3.2	8.6	13	12	e2.5	23
14	23	10	e4.0	4.5	e3.4	8.8	3.1	8.6	12	12	e2.5	e21
15	22	8.1	e4.3	4.5	e3.4	6.8	3.0	8.9	11	11	e2.9	e15
16	17	6.6	e4.0	4.6	e3.4	9.2	3.0	9.3	11	9.0	e2.8	36
17	13	14	3.9	6.2	e3.4	7.7	3.0	9.7	11	e5.9	e2.4	35
18	10	11	4.2	6.9	e3.4	6.6	3.1	9.3	10	e5.5	e2.5	43
19	9.9	8.2	4.0	5.9	e3.4	e5.8	3.4	8.6	11	e4.7	e2.5	20
20	11	7.7	3.9	5.2	e3.4	e5.0	3.8	8.4	14	4.4	e2.5	25
21	14	13	3.7	4.7	3.3	e4.2	4.4	8.9	13	4.2	e2.3	17
22	18	25	3.6	4.5	3.5	e3.8	5.1	15	10	9.9	e2.4	e14
23	22	42	3.5	6.2	e3.2	e3.6	5.6	17	9.8	19	2.2	e11
24	19	25	3.4	7.7	e3.1	e3.5	5.5	15	9.2	12	2.3	e9.0
25	e13	16	3.4	5.7	3.2	e3.2	5.0	11	8.3	14	2.3	e8.0
26	e9.7	12	3.4	5.1	6.4	e3.2	4.8	9.9	7.7	12	2.6	e7.0
27	7.1	9.3	3.4	9.4	52	3.3	7.5	11	8.0	9.2	20	e6.4
28	5.5	7.6	3.4	12	22	3.4	10	14	8.4	6.6	9.2	e5.5
29	4.6	6.5	3.4	7.9	---	3.5	8.5	18	7.8	5.3	6.8	e6.6
30	4.6	5.8	4.0	5.8	---	3.4	7.1	22	6.9	4.6	6.2	e11
31	4.7	---	4.8	e7.3	---	3.3	---	26	---	4.2	7.6	---
TOTAL	494.3	349.2	322.8	273.3	198.1	246.7	128.2	347.6	396.1	269.4	122.5	441.7
MEAN	15.9	11.6	10.4	8.82	7.08	7.96	4.27	11.2	13.2	8.69	3.95	14.7
MAX	51	42	119	35	52	34	10	26	26	19	20	43
MIN	4.6	4.5	3.4	4.5	3.1	3.2	3.0	5.5	6.9	4.2	2.2	5.5
AC-FT	980	693	640	542	393	489	254	689	786	534	243	876
CFSM	3.86	2.82	2.52	2.13	1.71	1.93	1.03	2.71	3.20	2.10	.96	3.56
IN.	4.45	3.15	2.91	2.46	1.78	2.22	1.15	3.13	3.57	2.43	1.10	3.98

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)#

	1999	2000	2001
MEAN	18.3	12.1	20.7
MAX	20.6	19.6	43.2
(WY)	2000	2000	1999
MIN	15.9	4.99	8.37
(WY)	2001	1999	1999

See Period of Record
e Estimated

15109048 PETERSON CREEK BELOW NORTH FORK NEAR AUKE BAY--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1999 - 2001		#
ANNUAL TOTAL	4270.4		3589.9				
ANNUAL MEAN	11.7		9.84		12.7		
HIGHEST ANNUAL MEAN					15.5		2000
LOWEST ANNUAL MEAN					9.84		2001
HIGHEST DAILY MEAN	150	Sep 16	119	Dec 5	364	Dec 27	1999
LOWEST DAILY MEAN	1.8	Mar 12	2.2	Aug 23	a1.5	Mar 7	1999
ANNUAL SEVEN-DAY MINIMUM	2.0	Mar 8	2.4	Aug 19	1.6	Mar 3	1999
MAXIMUM PEAK FLOW			242	Dec 5	616	Dec 28	1999
MAXIMUM PEAK STAGE			9.51	Dec 5	10.80	Dec 28	1999
INSTANTANEOUS LOW FLOW			b1.9	Aug 17	c		
ANNUAL RUNOFF (AC-FT)	8470		7120		9180		
ANNUAL RUNOFF (CFSM)	2.83		2.38		3.07		
ANNUAL RUNOFF (INCHES)	38.46		32.34		41.68		
10 PERCENT EXCEEDS	21		19		22		
50 PERCENT EXCEEDS	8.1		7.4		7.8		
90 PERCENT EXCEEDS	3.1		3.2		3.0		

See Period of Record

a Mar. 7 and 9, 1999

b Aug. 17-18; lowest recorded but may have been lower due to burried orifice

c Not determined, see lowest daily mean

15109048 PETERSON CREEK BELOW NORTH FORK NEAR AUKE BAY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

		SAMPLE LOCA- TION, CROSS SECTION (FT FM L BANK) (00009)		SPECIFIC CONDUCT- TANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAN- DARD UNITS) (00400)	TEMPERA- TURE WATER (DEG C) (00010)	BAROMET- RIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PERCENT SATURA- TION) (00300)	OXYGEN, DIS- SOLVED (PERCENT SATURA- TION) (00301)					
DATE	TIME													
JUN														
12...	1334		3.00	44	7.3	6.0	763	11.5	92					
12...	1336		7.00	41	7.4	6.0	763	11.5	92					
12...	1339		10.0	44	7.4	6.0	763	11.5	92					
12...	1341		13.0	44	7.3	6.0	763	11.5	92					
12...	1343		15.0	43	7.4	6.0	763	11.4	91					
		MEDIUM	SAMPLE	STREAM	GAGE	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SAM- PLING METHOD, CODES	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C) (00010)	COLOR (PLAT- INUM COBALT UNITS) (00080)	TUR- BIDITY (NTU) (00076)	BARO- METRIC PRES- SURE (MMOF HG) (00025)	
DATE	TIME	CODE	TYPE	(FT) (00004)	(FEET) (00065)	(00061)	(82398)	(00095)	(00400)	(00010)	(00080)	(00076)	(00025)	
APR														
09...	1340	9	9	6.00	6.25	3.2	70	--	7.1	2.5	50	.6	762	
JUN														
12...	1320	9	9	21.0	6.79	11	20	43	7.3	6.0	8	--	763	
AUG														
21...	1100	9	9	6.00	6.22	2.5	10	60	7.3	10.5	12	--	744	
		OXY- GEN, DIS- OLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L) (00900)	CAL- CIUM DIS- SOLVED (MG/L) AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L) AS MG) (00925)	SODIUM DIS- SOLVED (MG/L) AS NA) (00930)	ANC WATER UNFL- TRD FET FIELD (MG/L AS CACO3 (00410)	BICAR- BONATE WATER DIS IT (MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT (MG/L AS CACO3 (39086)	SUL- FATE DIS- SOLVED (MG/L) AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL) (00940)	FLOU- RIDE DIS- SOLVED (MG/L) AS F) (00950)	BRO- MIDE DIS- SOLVED (MG/L) AS BR) (71870)	
DATE	TIME	(00300)	(00301)	(00900)	(00915)	(00925)	(00930)	(00410)	(00453)	(39086)	(00945)	(00940)	(00950)	(71870)
APR														
09...	12.9	--	21	6.35	1.23	2.2	18	22	18	1.8	1.9	<.2	<.01	
JUN														
12...	11.5	92	20	6.46	.972	1.2	20	24	20	2.0	1.4	M	<.01	
AUG														
21...	9.6	88	26	8.00	1.34	1.8	27	31	25	2.6	1.2	.1	<.01	
		SIL- ICA, DIS- SOLVED (MG/L AS SIO2) (00955)	RISI- DUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN NITRITE DIS- SOLVED (MG/L) AS N) (00613)	NITRO- GEN NO2+NO3 DIS- SOLVED (MG/L) AS N) (00631)	NITRO- GEN, AMMO- NIA DIS- SOLVED (MG/L) AS N) (00608)	NITRO- GEN, AMMO- NIA + ORGANIC DIS- SOLVED (MG/L) AS N) (00623)	PHOS- PHORUS DIS- SOLVED (MG/L) AS P) (00666)	PHOS- PHORUS ORTHOPHOS- PHORUS DIS- SOLVED (MG/L) AS P) (00671)	BAR- IUM, DIS- SOLVED (UG/L) AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L) AS BE) (01010)	CAD- MIUM, DIS- SOLVED (UG/L) AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L) AS CR) (01030)	COBALT, DIS- SOLVED (UG/L) AS CO) (01035)
DATE	TIME	(00955)	(70300)	(00613)	(00631)	(00608)	(00623)	(00666)	(00671)	(01005)	(01010)	(01025)	(01030)	(01035)
APR														
09...	6.0	50	<.006	E.037	<.041	.14	<.060	<.018	5.9	<1.00	<8.00	<10.0	<13.0	
JUN														
12...	4.2	29	<.006	<.050	E.023	E.06	<.060	<.020	4.9	<1.00	<8.00	<10.0	<13.0	
AUG														
21...	5.6	41	E.003	.080	.116	.23	<.060	<.020	6.4	<1.00	<8.00	<10.0	<13.0	

15109048 PETERSON CREEK BELOW NORTH FORK NEAR AUKE BAY--Continued

DATE	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITH- IUM, DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENIUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
APR 09...	<4.7	310	<.08	3.9	13.9	<45.0	<53.0	<4.6	38.3	<8.0	<20
JUN 12...	E3.3	80	E.06	<4.0	6.2	<50.0	<50.0	E3.3	36.0	<8.0	E11
AUG 21...	<5.0	190	E.05	<4.0	18.6	<50.0	<50.0	<5.0	46.5	<8.0	<20

15129500 SITUK RIVER NEAR YAKUTAT

LOCATION.--Lat 59°35'00", long 139°29'31", in SE¹/₄ SW¹/₄ sec. 9, T. 27 S., R. 35 E. (Yakutat C-4 quad.), Yakutat Borough, Hydrologic Unit 19010401, in Tongass National Forest, on left bank 20 ft downstream from Alsek Road bridge, 3.5 mi downstream from Situk Lake, 8.8 mi northeast of Yakutat, and 10 mi upstream from mouth.

DRAINAGE AREA.--36 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1988 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level, by U.S. Forest Service.

REMARKS.--Records good, except for estimated daily discharges, which are poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum(*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Oct 6	1100	1300	69.03	Jan 15	0130	1110	68.50
Oct 12	1645	1890	70.11	Jan 18	0515	1030	68.32
Oct 15	0130	*2040	*70.37	Feb 27	1000	1380	69.10
Nov 22	1600	1170	68.64				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	641	687	383	494	674	669	162	228	195	165	172	178
2	488	595	367	468	550	515	154	280	192	161	164	164
3	389	819	333	666	474	411	e150	372	193	157	157	151
4	324	654	364	717	e425	343	205	397	190	164	151	142
5	556	540	607	589	e370	303	211	380	185	183	144	296
6	1120	461	596	624	336	335	200	374	183	267	137	348
7	1020	450	516	859	319	447	187	346	184	296	131	627
8	942	403	444	901	292	421	183	337	181	305	125	695
9	985	358	388	781	270	600	178	306	177	267	120	586
10	754	345	350	629	250	794	169	290	177	245	114	468
11	1070	650	337	504	236	858	190	264	177	228	110	385
12	1430	845	308	436	248	837	230	245	173	214	106	424
13	1400	648	282	483	349	693	237	227	169	204	103	772
14	1340	649	262	647	309	555	250	215	163	214	101	633
15	1670	678	247	948	277	483	241	207	162	198	99	519
16	1470	584	234	753	255	453	225	201	160	184	96	444
17	1230	640	228	691	237	386	210	197	162	173	94	409
18	919	543	310	880	222	331	203	191	162	165	94	369
19	714	471	293	777	210	285	200	181	161	158	94	326
20	583	431	263	662	200	251	196	174	162	153	94	293
21	510	722	243	581	192	227	190	210	167	158	92	266
22	658	952	226	551	184	210	182	220	170	175	92	296
23	857	819	214	505	176	e193	185	270	169	239	93	334
24	718	704	204	432	170	183	186	342	166	271	93	546
25	607	627	234	380	170	180	221	320	164	270	93	683
26	527	619	352	372	381	205	221	274	161	255	104	561
27	461	622	325	665	1170	209	262	245	158	236	104	485
28	404	528	309	615	866	197	279	225	159	217	111	427
29	361	449	335	515	---	183	254	212	164	201	175	367
30	409	393	493	439	---	174	231	206	168	189	197	321
31	744	---	566	655	---	171	---	200	---	179	198	---
TOTAL	25301	17886	10613	19219	9812	12102	6192	8136	5154	6491	3758	12515
MEAN	816	596	342	620	350	390	206	262	172	209	121	417
MAX	1670	952	607	948	1170	858	279	397	195	305	198	772
MIN	324	345	204	372	170	171	150	174	158	153	92	142
AC-FT	50180	35480	21050	38120	19460	24000	12280	16140	10220	12870	7450	24820
CFSM	22.7	16.6	9.51	17.2	9.73	10.8	5.73	7.29	4.77	5.82	3.37	11.6
IN.	26.14	18.48	10.97	19.86	10.14	12.51	6.40	8.41	5.33	6.71	3.88	12.93

e Estimated

15129500 SITUK RIVER NEAR YAKUTAT--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2001, BY WATER YEAR (WY)#

MEAN	553	346	401	278	245	247	250	282	232	192	255	520
MAX	878	598	739	620	471	516	370	418	345	292	532	838
(WY)	2000	1993	2000	2001	1997	1992	1998	1991	1991	1991	1991	1991
MIN	283	173	142	131	81.2	54.2	143	160	127	77.7	105	339
(WY)	1998	1999	1991	1996	1999	1989	1989	1996	1993	1993	1994	1997

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1989 - 2001#
--------------------	------------------------	---------------------	--------------------------

ANNUAL TOTAL	125192	137179	
ANNUAL MEAN	342	376	317
HIGHEST ANNUAL MEAN			382
LOWEST ANNUAL MEAN			230
HIGHEST DAILY MEAN	2150	Sep 28	1670
LOWEST DAILY MEAN	100	Mar 14	a92
ANNUAL SEVEN-DAY MINIMUM	106	Mar 9	93
MAXIMUM PEAK FLOW			2040
MAXIMUM PEAK STAGE			70.37
INSTANTANEOUS LOW FLOW			b91
ANNUAL RUNOFF (AC-FT)	248300	272100	229800
ANNUAL RUNOFF (CFSM)	9.50	10.4	8.81
ANNUAL RUNOFF (INCHES)	129.37	141.75	119.70
10 PERCENT EXCEEDS	649	708	603
50 PERCENT EXCEEDS	234	280	237
90 PERCENT EXCEEDS	150	160	118

See Period of Record
a Aug. 21 and 22
b Aug. 17-22 and Aug. 24-26
c Mar. 5-7, 1989

15129500 SITUK RIVER NEAR YAKUTAT--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971 to 1973 and 1988 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1970 to September 1973 (fragmentary) and May 1988 to current year.

INSTRUMENTATION.--Water-temperature recorder October 1970 to September 1973, at a site 500 ft downstream. Electronic water-temperature recorder since May 1988, set for 2-hour recording interval. Recording interval changed to 15-minutes on March 6, 1996.

REMARKS.--Records represent water temperature at sensor within 0.5°C. April 25 to September 30 record considered fair, due to 4 hour recording interval.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 20.0°C, July 4, 1997; minimum, 0.0°C, on many days during winters.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 17.5°C, June 27; minimum, 0.0°C on many days during winter.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.5	8.0	8.0	4.5	4.0	4.5	3.5	3.5	3.5	3.0	2.5	2.5
2	8.5	7.5	8.0	5.0	4.0	4.5	3.5	3.0	3.5	3.0	2.5	3.0
3	8.0	7.0	7.5	5.0	4.5	5.0	3.5	3.5	3.5	3.5	3.0	3.0
4	8.0	6.5	7.0	4.5	4.0	4.0	3.5	3.5	3.5	3.0	2.5	3.0
5	8.5	7.5	8.0	4.5	4.0	4.0	4.0	3.5	4.0	3.0	2.5	2.5
6	9.0	8.5	8.5	4.5	3.5	4.0	4.0	3.0	3.5	3.0	2.5	3.0
7	8.5	8.0	8.5	4.5	4.0	4.5	3.5	3.0	3.5	3.0	3.0	3.0
8	8.0	7.5	7.5	4.5	3.5	4.0	3.0	2.5	2.5	3.0	2.0	2.5
9	8.0	7.0	7.5	5.0	4.0	4.5	3.0	2.5	2.5	2.5	2.0	2.0
10	7.5	7.0	7.5	5.0	4.0	4.5	3.5	3.0	3.0	2.0	1.5	2.0
11	8.0	7.0	7.5	5.0	4.5	4.5	3.5	3.0	3.5	2.0	1.5	1.5
12	7.5	7.5	7.5	5.0	4.5	4.5	3.0	2.0	2.5	2.0	1.5	1.5
13	7.5	7.0	7.5	4.5	4.5	4.5	2.0	1.5	2.0	2.5	1.5	2.0
14	7.0	6.5	7.0	5.0	4.5	4.5	2.0	1.0	1.5	2.5	1.5	2.0
15	7.0	6.5	7.0	4.5	3.5	4.0	2.5	2.0	2.5	2.5	1.5	2.0
16	7.0	6.5	7.0	4.0	3.5	4.0	2.5	2.0	2.5	2.5	2.0	2.5
17	7.0	6.0	6.5	4.5	4.0	4.0	3.0	2.0	2.5	3.0	2.5	3.0
18	6.5	6.0	6.0	4.0	3.5	4.0	3.0	2.5	2.5	3.0	3.0	3.0
19	6.5	5.5	6.0	4.5	3.5	4.0	2.5	2.0	2.5	3.0	2.5	3.0
20	6.5	5.5	6.0	4.5	4.0	4.5	3.0	2.0	2.0	2.5	2.0	2.5
21	6.0	5.5	5.5	5.0	4.5	4.5	3.0	2.0	2.5	2.5	2.5	2.5
22	6.0	5.5	6.0	4.5	4.0	4.5	2.0	1.5	1.5	3.0	2.5	2.5
23	6.0	5.5	6.0	4.0	3.5	4.0	3.0	1.5	2.5	3.0	2.5	3.0
24	6.5	6.0	6.0	4.0	4.0	4.0	3.0	2.5	3.0	2.5	2.0	2.0
25	6.0	5.5	6.0	4.0	4.0	4.0	3.5	2.5	3.0	3.0	2.5	2.5
26	6.5	5.5	6.0	4.0	4.0	4.0	2.5	2.0	2.5	3.0	3.0	3.0
27	5.5	4.5	5.0	4.0	3.5	3.5	2.5	2.0	2.5	3.0	2.5	2.5
28	4.5	4.0	4.5	3.5	3.0	3.5	3.0	2.0	2.5	2.5	2.0	2.5
29	5.0	3.5	4.0	3.0	2.5	3.0	3.0	2.5	3.0	2.5	2.0	2.5
30	5.0	4.5	4.5	3.5	2.5	3.0	3.0	2.5	2.5	2.5	2.0	2.0
31	5.0	4.5	4.5	---	---	---	3.0	2.5	2.5	2.5	2.0	2.0
MONTH	9.0	3.5	6.6	5.0	2.5	4.1	4.0	1.0	2.7	3.5	1.5	2.5

15129500 SITUK RIVER NEAR YAKUTAT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	2.5	2.0	2.5	1.5	1.0	1.0	3.5	.0	1.5	5.5	4.0	---
2	2.5	2.0	2.0	2.0	1.0	1.5	4.5	1.5	2.5	4.0	3.0	---
3	2.5	1.5	2.0	2.5	1.0	1.5	3.0	.0	1.0	4.5	2.5	---
4	2.0	1.5	2.0	2.5	1.0	1.5	2.5	.0	1.0	4.0	2.5	---
5	---	.5	---	1.5	.5	1.0	4.0	1.0	2.0	3.5	2.5	---
6	2.0	.5	1.0	2.0	.5	1.5	4.0	.5	2.0	6.5	3.0	---
7	2.0	.5	1.5	2.0	1.0	1.5	4.5	1.5	3.0	4.5	4.0	---
8	1.5	.5	1.0	2.5	1.0	1.5	2.5	.5	1.5	7.5	3.0	---
9	1.5	.5	1.0	1.5	.0	.5	5.0	1.0	2.5	5.5	4.5	---
10	.5	.0	.0	1.0	.0	.5	4.5	1.0	3.0	8.0	3.0	---
11	1.5	.0	1.0	1.5	1.0	1.5	3.5	2.0	2.5	6.5	4.5	---
12	2.0	1.5	1.5	1.5	1.0	1.0	3.5	1.5	2.5	9.5	4.0	---
13	1.5	.5	1.0	2.0	1.0	1.5	4.0	1.0	2.5	8.0	5.0	---
14	1.0	.0	.5	2.5	1.0	1.5	4.0	2.0	3.0	9.0	5.0	---
15	1.0	.0	.5	2.5	1.5	2.0	5.5	2.0	3.5	7.5	6.0	---
16	1.0	.0	.5	2.5	1.0	1.5	5.5	1.5	3.0	9.0	5.0	---
17	1.0	.0	.5	3.0	1.0	1.5	6.0	1.5	3.5	7.5	5.5	---
18	1.0	.0	.5	2.0	.0	1.0	5.0	2.5	4.0	9.0	5.5	---
19	2.0	.0	1.0	1.5	.0	.5	6.5	2.5	4.0	9.0	5.0	---
20	2.0	.5	1.5	1.5	.0	.0	6.5	2.0	4.0	8.0	5.5	---
21	2.5	1.5	2.0	2.0	.0	.5	6.5	2.0	4.0	7.0	6.0	---
22	1.5	.5	1.0	2.0	.0	1.0	5.5	2.0	4.0	7.5	5.5	---
23	2.0	.0	1.0	2.5	.0	.5	---	3.0	---	6.5	5.5	---
24	1.5	.5	1.0	3.0	1.0	2.0	---	---	---	6.5	5.5	---
25	1.0	.0	.5	4.0	2.0	3.0	4.5	3.0	---	8.5	5.5	---
26	.5	.0	.0	3.0	.0	2.0	6.0	2.5	---	11.0	5.5	---
27	.5	.0	.5	3.0	.0	1.0	5.0	3.5	---	8.5	6.5	---
28	1.5	.5	1.0	3.0	1.0	1.5	5.0	3.0	---	11.0	7.0	---
29	---	---	---	3.5	1.0	2.0	5.5	2.5	---	9.5	8.0	---
30	---	---	---	2.5	1.5	2.0	5.5	3.5	---	11.0	7.0	---
31	---	---	---	2.5	1.0	1.5	---	---	---	11.5	8.0	---
MONTH	---	.0	---	4.0	.0	1.3	---	---	---	11.5	2.5	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	10.5	8.5	---	14.0	12.0	---	15.0	12.0	---	13.5	11.0	---
2	9.5	8.5	---	15.5	12.0	---	16.5	11.5	---	12.5	11.0	---
3	9.0	8.0	---	14.5	12.5	---	15.0	13.5	---	12.5	9.5	---
4	11.0	7.5	---	13.5	12.5	---	14.0	12.5	---	11.5	9.5	---
5	10.0	8.0	---	12.5	11.5	---	14.5	12.5	---	11.5	10.0	---
6	11.5	8.0	---	11.5	11.0	---	15.5	11.5	---	12.0	10.5	---
7	11.5	9.0	---	12.0	11.0	---	14.0	12.0	---	11.0	10.0	---
8	14.0	8.0	---	13.0	10.5	---	14.0	12.5	---	12.0	10.5	---
9	15.0	9.5	---	13.0	10.5	---	15.0	11.5	---	12.0	10.0	---
10	12.5	10.0	---	14.0	11.0	---	14.0	11.0	---	12.5	10.0	---
11	11.0	10.0	---	12.5	11.5	---	14.5	12.0	---	11.5	10.0	---
12	11.0	10.0	---	12.5	11.0	---	15.5	11.0	---	11.0	9.5	---
13	12.0	9.5	---	12.5	11.0	---	16.0	11.0	---	11.0	9.5	---
14	13.0	10.0	---	13.5	11.0	---	14.5	12.5	---	11.5	10.5	---
15	12.5	10.0	---	13.5	11.5	---	14.5	12.0	---	12.0	10.5	---
16	14.5	10.5	---	13.0	11.5	---	15.5	12.0	---	11.5	11.0	---
17	13.0	11.0	---	13.5	11.5	---	14.0	11.5	---	11.5	11.0	---
18	13.5	10.5	---	14.0	11.5	---	14.0	12.0	---	11.5	10.5	---
19	15.0	10.5	---	16.0	11.5	---	13.5	12.0	---	11.5	10.0	---
20	16.0	12.0	---	17.0	12.5	---	14.0	11.5	---	11.0	10.0	---
21	14.5	12.0	---	15.0	13.0	---	13.5	11.5	---	10.5	9.0	---
22	13.5	12.0	---	13.0	12.0	---	14.5	10.5	---	10.0	9.5	---
23	14.5	12.0	---	12.5	12.0	---	13.5	12.0	---	9.5	9.0	---
24	16.5	11.0	---	13.5	12.0	---	14.0	11.5	---	9.0	8.5	---
25	14.5	12.5	---	13.0	12.0	---	13.0	10.5	---	9.5	8.5	---
26	16.0	12.0	---	13.5	12.5	---	12.5	11.0	---	10.0	8.5	---
27	17.5	11.5	---	15.0	12.5	---	12.5	10.5	---	9.5	9.0	---
28	15.0	12.0	---	14.0	12.5	---	12.0	11.0	---	9.5	8.5	---
29	13.0	12.0	---	14.0	12.5	---	12.5	11.0	---	9.0	7.5	---
30	14.5	12.0	---	13.5	12.5	---	12.5	11.5	---	9.5	8.0	---
31	---	---	---	13.5	12.0	---	12.5	11.0	---	---	---	---
MONTH	17.5	7.5	---	17.0	10.5	---	16.5	10.5	---	13.5	7.5	---

15129600 OPHIR CREEK NEAR YAKUTAT

LOCATION.--Lat 59°31'26", long 139°44'37", in SW¹/₄ NW¹/₄ NE¹/₄ sec. 1, T. 28 S., R. 33 E. (Yakutat C-5 SW quad), Hydrologic Unit 19010401, in Tongass National Forest, on right bank 0.8 mi upstream from Summit Lake and 2 mi south of Yakutat.

DRAINAGE AREA.-- 2.5 mi², approximately.

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage is 9.05 ft above sea level, determined by levels survey.

REMARKS.--Records fair except for estimated daily discharges which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	38	34	e37	e45	44	15	16	7.0	1.6	3.4	3.9
2	33	37	32	e36	e40	39	14	18	6.3	1.5	3.3	3.4
3	29	50	30	e44	38	36	e16	21	5.8	1.4	3.2	2.8
4	26	43	34	e47	37	33	17	21	5.4	1.5	2.9	2.5
5	34	37	43	e42	35	32	16	20	5.0	2.3	2.7	8.5
6	51	34	40	e43	33	34	15	20	4.4	5.7	2.6	8.1
7	51	33	37	e53	32	40	13	21	4.0	6.3	2.4	12
8	50	31	34	e55	30	38	13	22	3.8	8.4	2.3	9.8
9	60	28	32	e52	29	45	13	20	3.6	6.6	2.2	7.8
10	55	28	31	e44	27	57	12	18	3.5	5.5	2.1	6.6
11	70	40	31	e38	26	57	14	17	3.2	4.8	2.0	5.8
12	70	52	29	e34	27	54	17	16	3.2	4.2	1.9	7.5
13	73	45	28	e36	32	49	17	14	3.0	4.2	1.8	13
14	74	45	26	e44	29	43	19	13	2.7	4.3	1.7	10
15	79	44	25	e56	27	41	19	12	2.8	3.9	1.7	8.1
16	78	41	25	e50	26	40	18	11	2.5	3.7	1.6	8.3
17	77	43	24	e46	24	37	16	11	2.5	3.6	1.5	10
18	66	38	28	e54	23	33	16	10	2.4	3.4	1.5	10
19	58	34	27	e50	22	30	16	9.0	2.4	3.3	1.5	9.4
20	51	33	25	e45	22	27	15	8.3	2.3	3.0	1.6	8.2
21	47	40	23	e41	20	25	15	10	2.2	3.3	1.3	7.6
22	54	51	23	e40	19	23	14	9.7	2.2	3.7	1.2	8.0
23	58	49	22	e38	18	22	13	13	2.1	7.3	1.2	10
24	52	45	21	e34	17	21	13	15	2.0	7.4	1.2	36
25	47	45	23	e31	17	20	16	14	1.9	6.3	1.2	47
26	44	46	25	e30	33	20	18	12	1.9	5.6	1.5	38
27	40	47	24	e44	60	20	19	11	1.8	5.1	1.4	31
28	37	43	23	e43	50	18	19	10	1.7	4.2	1.7	27
29	34	39	25	e38	---	17	19	9.1	1.6	4.0	4.8	23
30	35	36	e31	e35	---	16	17	8.2	1.7	3.7	5.0	20
31	40	---	e38	e44	---	16	---	7.7	---	3.6	4.9	---
TOTAL	1611	1215	893	1324	838	1027	474	438.0	94.9	133.4	69.3	403.3
MEAN	52.0	40.5	28.8	42.7	29.9	33.1	15.8	14.1	3.16	4.30	2.24	13.4
MAX	79	52	43	56	60	57	19	22	7.0	8.4	5.0	47
MIN	26	28	21	30	17	16	12	7.7	1.6	1.4	1.2	2.5
AC-FT	3200	2410	1770	2630	1660	2040	940	869	188	265	137	800
CFSM	20.8	16.2	11.5	17.1	12.0	13.3	6.32	5.65	1.27	1.72	.89	5.38
IN.	23.97	18.08	13.29	19.70	12.47	15.28	7.05	6.52	1.41	1.98	1.03	6.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2001, BY WATER YEAR (WY)

	MEAN	32.9	25.8	24.3	19.0	16.2	17.0	16.5	14.5	7.11	4.55	8.35	19.1
MAX	60.7	43.8	49.1	42.7	35.9	38.3	28.3	34.4	19.7	9.67	19.4	30.8	
(WY)	2000	2000	2000	2001	1997	1992	1998	1999	1999	1998	1998	1998	
MIN	20.5	12.6	8.96	5.13	3.31	4.13	7.85	6.17	2.01	.66	1.32	5.90	
(WY)	1998	1996	1996	1993	1999	1999	1993	1996	1993	1993	1993	1993	

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1992 - 2001	
ANNUAL TOTAL	7540.3		8520.9			
ANNUAL MEAN	20.6		23.3		17.1	
HIGHEST ANNUAL MEAN					23.3	
LOWEST ANNUAL MEAN					10.9	
HIGHEST DAILY MEAN	79	Oct 15	79	Oct 15	e118	Dec 27 1999
LOWEST DAILY MEAN	1.9	Jul 10	a1.2	Aug 22	.27	Jul 31 1993
ANNUAL SEVEN-DAY MINIMUM	2.1	Jul 5	1.3	Aug 21	.39	Jul 28 1993
MAXIMUM PEAK FLOW			84	Oct 15	b159	Oct 18 1999
MAXIMUM PEAK STAGE			11.93	Oct 15	b12.55	Oct 18 1999
INSTANTANEOUS LOW FLOW			c1.0	Aug 22	d.21	Jul 28 1993
ANNUAL RUNOFF (AC-FT)	14960		16900		12400	
ANNUAL RUNOFF (CFSM)	8.24		9.34		6.85	
ANNUAL RUNOFF (INCHES)	112.20		126.79		93.06	
10 PERCENT EXCEEDS	44		47		37	
50 PERCENT EXCEEDS	15		20		13	
90 PERCENT EXCEEDS	3.2		2.3		3.4	

a Aug. 22 to 25

b May have been exceeded during period of gage malfunction from Dec. 25 to 28, 1999

c Aug. 22 to 26

d Minimum recorded, Jul. 28, Aug. 2, Aug. 7 to Aug. 10, 1993, but may have been less during period water was below intake Jul. 28, Aug. 2, and Aug. 8 to Aug. 10, 1993

e Estimated

15200280 GULKANA RIVER AT SOURDOUGH

LOCATION.--Lat 62°31'15", long 145°31'51", in SE¹/₄ NE¹/₄ sec. 35, T. 9 N., R. 2 W. (Gulkana C-4 quad), Hydrologic Unit 19020102, near left bank on downstream side of pier of Alyeska Pipeline Service Company bridge, 0.3 mi downstream from Sourdough Creek and 0.8 mi southwest of Sourdough.

DRAINAGE AREA.--1,770 mi².

PERIOD OF RECORD.--October 1972 to September 1978, May to September 1982, October 1988 to September 1993, May 1997 to current year.

REVISED RECORDS.--WRD AK-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,845.96 ft above sea level (levels of Alyeska Engineering).

REMARKS.--Records fair except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2450	e1000	e700	e500	e400	e320	e340	e1100	3460	1140	2580	917
2	2190	e1000	e700	e500	e400	e320	e360	e1100	3350	1140	2560	1000
3	1950	e1000	e700	e500	e400	e320	e360	e1200	3260	1130	2230	1370
4	1890	e950	e700	e500	e400	e320	e360	e1200	3050	1090	2020	1790
5	1860	e950	e700	e500	e400	e320	e380	e1300	2850	1130	1930	1860
6	1880	e900	e650	e500	e380	e320	e400	e1400	2620	1410	1790	2260
7	1960	e900	e650	e500	e380	e320	e420	e1500	2530	1830	1640	2470
8	2000	e900	e650	e500	e380	e320	e420	e1600	2520	1920	1520	2290
9	1860	e900	e650	e500	e380	e320	e440	e1700	2500	2120	1420	2080
10	1710	e900	e650	e500	e380	e320	e440	e1800	2340	2140	1330	1890
11	1700	e850	e600	e480	e360	e320	e460	e1900	2220	1960	1270	1740
12	1700	e850	e600	e480	e360	e320	e480	e1900	2130	1830	1220	1620
13	1690	e850	e600	e480	e360	e300	e500	1970	2080	1690	1170	1570
14	1660	e850	e600	e480	e360	e300	e500	2230	2100	1560	1110	1550
15	1660	e850	e600	e480	e360	e300	e550	2730	2050	1510	1080	1520
16	1540	e800	e600	e460	e340	e300	e550	3410	1960	1520	1040	1460
17	1430	e800	e600	e460	e340	e300	e600	3710	1850	1440	1040	1400
18	1370	e800	e600	e460	e340	e300	e600	3930	1740	1350	1070	1350
19	e1300	e800	e600	e460	e340	e300	e650	4080	1670	1270	1040	1310
20	e1300	e800	e600	e460	e340	e300	e650	4150	1650	1200	1040	1290
21	e1200	e750	e550	e440	e320	e300	e700	4010	1690	1180	1010	1310
22	e1200	e750	e550	e440	e320	e300	e700	3740	1620	1170	978	1310
23	e1100	e750	e550	e440	e320	e300	e750	3620	1540	1120	925	1320
24	e1100	e750	e550	e440	e320	e300	e750	4150	1460	1150	947	1290
25	e1100	e750	e550	e440	e320	e300	e800	4930	1360	1220	1010	1270
26	e1100	e700	e550	e420	e320	e300	e850	4780	1290	1310	1010	1240
27	e1100	e700	e550	e420	e320	e300	e850	4280	1220	1470	1010	1200
28	e1100	e700	e550	e420	e320	e300	e900	4000	1190	1790	978	1170
29	e1000	e700	e550	e420	---	e320	e950	3960	1130	2080	977	1140
30	e1000	e700	e550	e420	---	e340	e1000	3800	1110	2260	962	1100
31	e1000	---	e550	e400	---	e340	---	3570	---	2360	954	---
TOTAL	47100	24900	18800	14400	9960	9660	17710	88750	61540	47490	40861	45087
MEAN	1519	830	606	465	356	312	590	2863	2051	1532	1318	1503
MAX	2450	1000	700	500	400	340	1000	4930	3460	2360	2580	2470
MIN	1000	700	550	400	320	300	340	1100	1110	1090	925	917
AC-FT	93420	49390	37290	28560	19760	19160	35130	176000	122100	94200	81050	89430
CFSM	.86	.47	.34	.26	.20	.18	.33	1.62	1.16	.87	.74	.85
IN.	.99	.52	.40	.30	.21	.20	.37	1.87	1.29	1.00	.86	.95

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2001, BY WATER YEAR (WY)#

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	997	552	407	344	304	299	481	3246	2779	1516	1289	1413																	
MAX	1877	1020	777	629	478	420	1344	5630	4969	2696	2821	4253																	
(WY)	1991	1989	1989	1989	1989	1992	1993	1989	1977	1992	1992	1990																	
MIN	437	287	208	200	200	200	227	875	1150	637	714	505																	
(WY)	1975	1976	1974	1974	1974	1974	2000	2000	1998	1976	1989	1974																	

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1973 - 2001#
ANNUAL TOTAL	412582	426258	
ANNUAL MEAN	1127	1168	1139
HIGHEST ANNUAL MEAN			1564
LOWEST ANNUAL MEAN			658
HIGHEST DAILY MEAN	4700 Jun 8	4930 May 25	12100 Sep 12 1990
LOWEST DAILY MEAN	a220 Apr 16	b300 Mar 13	c200 Dec 6 1973
ANNUAL SEVEN-DAY MINIMUM	220 Apr 16	300 Mar 13	200 Dec 6 1973
MAXIMUM PEAK FLOW		5090 May 25	d12700 Sep 12 1990
MAXIMUM PEAK STAGE		8.43 May 25	11.26 Sep 12 1990
MAXIMUM PEAK STAGE			f16.03 May 7 1976
ANNUAL RUNOFF (AC-FT)	818400	845500	825000
ANNUAL RUNOFF (CFSM)	.64	.66	.64
ANNUAL RUNOFF (INCHES)	8.67	8.96	8.74
10 PERCENT EXCEEDS	2600	2230	2850
50 PERCENT EXCEEDS	775	977	672
90 PERCENT EXCEEDS	230	320	250

See period of record, partial years used in monthly statistics

a Apr. 16-26

b Mar. 13-27

c Dec. 6, 1973 to Apr. 12, 1974

d From rating curve extended above 4,600 ft³/s

e Estimated

f Backwater from ice

15215990 NICOLET CREEK NEAR CORDOVA

LOCATION.--Lat 60°31'09", long 145°47'23", in SW¹/₄ SW¹/₄ SE¹/₄ sec. 32, T. 15 S., R. 3 W. (Cordova C-5 quad), Hydrologic Unit 19020201, on right bank 275 ft upstream from culvert for Whitshed Road, 475 ft upstream from mouth and 2.1 mi southwest of Cordova.

DRAINAGE AREA.--0.75 mi².

PERIOD OF RECORD.--Annual maximum, water years 1991-99. September 1999 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 40 ft above sea level, from topographic map.

REMARKS.--Records good except for discharges greater than 60 ft³/s, which are fair; and estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	9.5	e3.0	e15	e25	e4.5	e1.0	7.8	5.7	.19	1.6	2.7
2	2.2	3.2	e2.5	e20	e4.0	e3.0	e1.0	27	5.5	.17	1.1	1.7
3	2.1	3.2	e2.0	e35	e3.0	e1.0	e5.5	31	4.8	.17	.95	2.0
4	2.0	2.4	e4.0	e30	e2.0	e2.5	e10	5.4	4.0	5.9	.93	33
5	60	2.3	e80	e9.5	e1.0	e3.0	e4.0	8.1	3.3	56	.78	14
6	58	2.2	e25	e35	e1.0	e8.0	e3.0	12	3.1	7.6	.68	2.8
7	23	4.8	e25	e80	e1.0	e9.5	e2.5	8.1	2.8	3.0	.60	5.2
8	9.8	2.8	e10	e35	e1.0	e4.0	e3.5	9.6	2.4	3.0	.56	3.5
9	4.5	3.9	e8.0	e12	e1.0	e15	e2.0	7.8	1.9	1.7	.53	3.1
10	18	61	e28	e4.5	e1.0	e10	e4.0	9.5	1.6	1.2	.47	1.7
11	17	42	e22	e4.0	e1.0	e50	e20	7.0	1.3	1.4	.40	1.6
12	24	3.0	e9.0	e10	e1.0	e35	e10	6.7	1.2	1.3	.37	16
13	35	14	e9.0	e25	e1.0	e5.0	e6.0	7.9	1.4	1.9	.34	38
14	54	35	e7.0	e80	e1.0	e4.5	e15	9.6	1.2	3.7	.29	24
15	41	3.4	e6.0	e50	e1.0	e10	e20	15	1.0	1.5	.31	3.5
16	34	15	e5.0	e7.0	e1.0	e10	e9.0	11	.80	1.2	.39	2.7
17	7.3	40	e10	e70	e1.0	e4.0	e9.0	7.8	.79	.97	.53	12
18	3.9	73	e15	e40	e1.0	e2.5	e7.0	7.3	.91	.80	.57	7.5
19	5.3	43	e20	e40	e2.0	e2.0	e6.0	10	.63	.68	7.9	3.8
20	2.9	13	e15	e9.5	e2.0	e1.7	e6.0	8.5	.46	39	15	3.8
21	2.4	52	e15	e10	e2.5	e1.6	e9.0	33	.44	18	2.0	2.9
22	43	7.4	e9.0	e15	e1.5	e1.6	e9.0	11	.44	36	1.2	11
23	9.3	9.1	e10	e10	e2.0	e1.5	e9.0	9.6	.36	6.7	.88	22
24	7.9	11	e15	e5.5	e1.5	e3.5	e10	14	.29	3.1	1.5	19
25	105	9.7	e15	e7.5	e4.0	e20	e25	14	.26	2.4	1.2	9.9
26	18	5.7	e30	e60	e20	e25	e20	7.0	.26	2.2	3.0	4.8
27	3.6	4.6	e25	e30	e70	e9.0	e25	6.6	.24	1.8	2.7	3.1
28	2.5	e4.0	e15	e8.5	e8.0	e3.0	10	7.2	.22	1.7	45	5.9
29	2.7	e4.0	e80	e6.5	---	e2.0	e6.5	6.4	.18	2.5	19	2.4
30	16	e3.5	e50	e6.5	---	e4.5	e6.5	7.1	.19	1.9	35	1.9
31	8.0	---	e50	e55	---	e4.0	---	6.2	---	2.7	8.2	---
TOTAL	624.8	487.7	619.5	826.0	161.5	260.9	274.5	339.2	47.67	210.38	153.98	265.5
MEAN	20.2	16.3	20.0	26.6	5.77	8.42	9.15	10.9	1.59	6.79	4.97	8.85
MAX	105	73	80	80	70	50	25	33	5.7	56	45	38
MIN	2.0	2.2	2.0	4.0	1.0	1.0	1.0	5.4	.18	.17	.29	1.6
AC-FT	1240	967	1230	1640	320	517	544	673	95	417	305	527
CFSM	26.9	21.7	26.6	35.5	7.69	11.2	12.2	14.6	2.12	9.05	6.62	11.8
IN.	30.99	24.19	30.73	40.97	8.01	12.94	13.62	16.82	2.36	10.43	7.64	13.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2001, BY WATER YEAR (WY)#

	MEAN	19.9	12.1	20.2	18.8	8.52	9.31	10.1	13.5	5.10	6.19	5.01	8.97
MAX	20.2	16.3	20.4	26.6	11.2	10.2	11.1	16.1	8.62	6.79	5.05	9.09	
(WY)	2001	2001	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
MIN	19.6	7.85	20.0	10.9	5.77	8.42	9.15	10.9	1.59	5.59	4.97	8.85	
(WY)	2000	2000	2001	2000	2001	2001	2001	2001	2001	2000	2001	2001	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 2000 - 2001#
ANNUAL TOTAL	4404.3	4271.63	
ANNUAL MEAN	12.0	11.7	11.5
HIGHEST ANNUAL MEAN			11.7
LOWEST ANNUAL MEAN			11.3
HIGHEST DAILY MEAN	105	Oct 25	140
LOWEST DAILY MEAN	a1.1	Jan 15	b.17
ANNUAL SEVEN-DAY MINIMUM	1.3	Jan 12	.19
MAXIMUM PEAK FLOW		c202	Nov 11
MAXIMUM PEAK STAGE		c24.48	Nov 11
INSTANTANEOUS LOW FLOW		.16	Jul 2
ANNUAL RUNOFF (AC-FT)	8740	8470	8340
ANNUAL RUNOFF (CFSM)	16.0	15.6	15.4
ANNUAL RUNOFF (INCHES)	218.45	211.87	208.61
10 PERCENT EXCEEDS	32	35	32
50 PERCENT EXCEEDS	6.4	5.5	5.5
90 PERCENT EXCEEDS	1.6	.94	1.2

See Period of Record and Remarks

a From Jan. 15 to Jan. 17 and Jul. 14

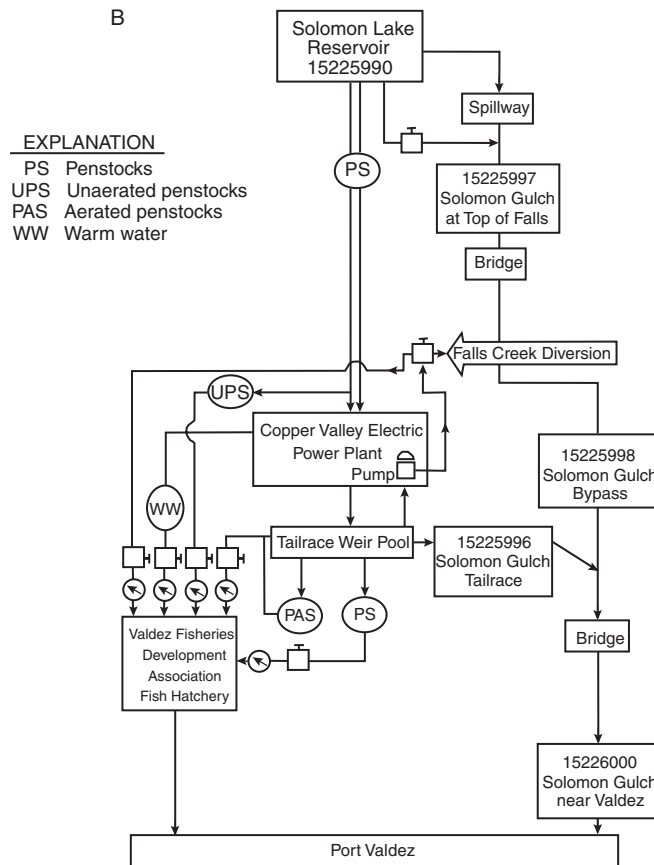
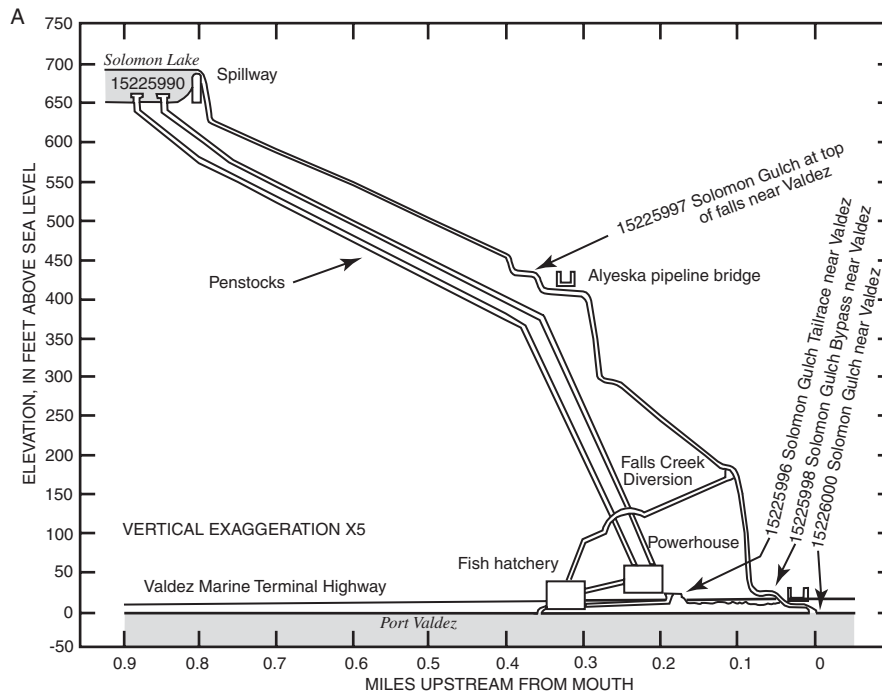
b Jul. 2 and 3

c May have been exceeded during period of gage malfunction from Nov. 28 to Apr. 30

d From rating curve extended above 66 ft³/s on basis of slope-area measurement of peak flow

e Estimated

f Site and datum then in use



Solomon Gulch (A) profile and (B) schematic diagram of flows.

15225990 SOLOMON LAKE NEAR VALDEZ

LOCATION.--Lat 61°04'25", long 146°18'08", in NE¹/₄ SW¹/₄ sec. 21, T. 9 S., R. 6 W. (Valdez A-7 SE quad), Hydrologic Unit 19020201, within Valdez Corporate boundary, at outlet of Solomon Lake, 0.7 mi upstream from mouth of Solomon Gulch, and 4.6 mi southeast of Valdez.

DRAINAGE AREA.--19.2 mi².

PERIOD OF RECORD.--October 1991 to current year. Additional unpublished records prior to period of record available from Copper Valley Electric Association and in station files of Geological Survey.

REMARKS.--Reservoir is formed by a rockfill dam at outlet of Solomon Lake. Reservoir is used for power; power-plant operation began January 6, 1982. Usable capacity is 31,500 acre-feet below spillway crest at 685 ft. Discharge released to the penstocks is accounted for at Solomon Gulch Tailrace (station 15225996). Releases through the dam to maintain minimum flows, spillway releases, and incremental flow are accounted for at the Solomon Gulch at top of falls gage (station 15225997).

COOPERATION.--Reservoir contents furnished by Copper Valley Electric Association.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents 32,500 acre-ft, September 21, 1993, from crest-stage gage and rating extended above 31,500 acre-ft; minimum contents, 2,167 acre-ft, May 1, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 31,900 acre-ft July 5, July 21, and September 5; minimum contents, 2,180 acre-ft, May 8.

MONTH END RESERVOIR ELEVATION, IN FEET, AND CONTENTS, IN ACRE FEET
WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ELEVATION	CONTENTS	CHANGE IN CONTENTS
SEP 30	684.5	30,100	----
OCT 31	677.6	26,200	-3,900
NOV 30	672.6	23,400	-2,800
DEC 31	666.8	20,400	-3,000
JAN 31	661.6	17,800	-2,600
FEB 28	651.2	13,100	-4,700
MAR 31	636.3	7,400	-5,700
APR 30	621.2	3,000	-4,400
MAY 31	634.2	6,700	+3,700
JUN 30	680.0	27,700	+21,000
JUL 31	685.3	31,600	+3,900
AUG 31	685.4	31,700	+100
SEP 30	683.0	29,800	-1,900
		CAL YR 2000	-2,900
		WTR YR 2001	-300

15225996 SOLOMON GULCH TAILRACE NEAR VALDEZ

LOCATION.--Lat 61°05'01", long 146°18'10", in NE¹/₄ SE¹/₄ SW¹/₄ sec. 16, T. 9 S., R. 6 W. (Valdez A-7 SE quad), Hydrologic Unit 19020201, within Valdez Corporate boundary, on left wingwall of tailrace pool of Copper Valley Electric Association powerhouse facility, 350 ft upstream from mouth at Solomon Gulch, and 3.8 mi southeast of Valdez.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--September 1986 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 40 ft above sea level, from topographic map.

REMARKS.--Records good. Discharge shown herein is flow through the Solomon Gulch Power Plant turbines. Solomon Lake, 0.8 mi upstream, supplies water to the power-plant through two 48-in. diameter penstocks. Water for the fish hatchery, diverted upstream from the gage, is not included in these published daily values. Annual mean discharge for these diversions for 2001 water year was 12.4 ft³/s.

COOPERATION.--Records of daily discharge diverted to the fish hatchery are furnished by Valdez Fisheries Development Association. Copper Valley Electric Association provides tables of hourly power output through the turbines.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 293 ft³/s, January 2 and 3, 1992, gage height, 3.04 ft; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 245 ft³/s, June 6, gage height, 2.97 ft; no flow for periods on May 10, and May 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	178	64	62	54	77	86	64	57	200	187	180	189
2	190	75	60	55	67	83	66	58	195	197	189	188
3	192	67	71	60	66	112	86	60	196	197	183	187
4	189	68	64	68	70	110	81	71	202	195	179	193
5	199	64	70	66	75	107	85	72	206	204	171	197
6	187	65	68	71	98	106	84	72	209	204	189	196
7	174	70	68	69	99	109	79	75	153	158	187	196
8	172	69	68	66	99	82	81	21	192	188	196	180
9	181	65	57	73	105	82	80	1.0	195	172	145	172
10	189	58	56	68	97	85	82	4.6	194	171	196	184
11	141	59	54	58	84	84	84	38	201	176	189	189
12	102	61	54	54	86	86	91	38	158	174	191	190
13	102	66	58	74	75	103	90	47	202	185	176	191
14	159	61	61	65	81	105	105	54	204	197	202	140
15	182	57	72	69	87	107	79	62	202	198	202	174
16	192	57	68	56	105	107	66	64	196	201	200	175
17	192	53	68	67	115	103	53	70	196	202	197	182
18	197	56	68	56	112	109	58	80	198	193	197	172
19	197	60	65	55	115	93	60	89	200	193	187	163
20	196	55	57	61	92	87	59	87	204	189	201	141
21	197	56	53	69	83	102	59	46	204	184	202	125
22	198	63	56	67	102	112	64	68	199	182	200	164
23	204	79	55	68	109	106	65	95	200	187	202	168
24	153	67	57	71	106	101	65	209	199	180	200	138
25	152	67	56	66	113	95	75	207	201	183	189	116
26	108	69	66	65	107	97	58	207	200	176	193	117
27	58	65	65	84	85	94	63	198	201	178	203	130
28	63	66	63	85	80	86	59	197	198	176	205	157
29	66	65	59	98	---	89	56	209	196	182	203	173
30	77	66	65	91	---	64	57	202	191	183	204	176
31	79	---	54	90	---	63	---	201	---	176	198	---
TOTAL	4866	1913	1918	2119	2590	2955	2154	2959.6	5892	5768	5956	5063
MEAN	157	63.8	61.9	68.4	92.5	95.3	71.8	95.5	196	186	192	169
MAX	204	79	72	98	115	112	105	209	209	204	205	197
MIN	58	53	53	54	66	63	53	1.0	153	158	145	116
AC-FT	9650	3790	3800	4200	5140	5860	4270	5870	11690	11440	11810	10040

CAL YR 2000 TOTAL 45455 MEAN 124 MAX 231 MIN 39 AC-FT 90160
WTR YR 2001 TOTAL 44153.6 MEAN 121 MAX 209 MIN 1.0 AC-FT 87580

15225997 SOLOMON GULCH AT TOP OF FALLS NEAR VALDEZ

LOCATION.--Lat 61°04'45", long 146°18'11", in SE¹/₄ NE¹/₄ NW¹/₄ sec. 21, T. 9 S., R. 6 W. (Valdez A-7 SE quad), Hydrologic Unit 19020201, within Valdez Corporate boundary, on right bank, 72 ft above Alyeska Pipeline Service Company Bridge, 150 ft upstream from top of falls, 0.3 mi upstream from mouth, and 4.2 mi southeast of Valdez.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--September 1986 to current year.

REVISED RECORDS.--WDR AK-00-1: 1999.

GAGE.--Water-stage recorder. Elevation of gage is 400 ft above sea level, from topographic map. Prior to October 1, 1991, discharge computed for site 150 ft downstream at datum 72.00 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Discharge shown herein represents controlled releases from bypass valve and flow over the spillway of dam at Solomon Lake, 0.5 mi upstream, plus inflow between the spillway and the gage. Spillway crest elevation is 685 ft above sea level, from construction plans. Water for power generation is diverted from Solomon Lake (see records for station 15225996). Water is diverted for fish hatchery use 1,150 ft downstream from gage. Reservoir spilled July 5 to August 10, August 13-26, August 28 to September 1, September 4-7, and September 14-15.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,280 ft³/s, October 11, 1986, by computation of peak flow by several indirect measurement methods; gage height, 82.20 ft from water surface profiles for 1986 flood at top of falls and at datum 72.00 ft lower (12.90 ft from profile at present site and datum); minimum daily discharge, about 0.20 ft³/s, January 23 to April 6, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 834 ft³/s, September 5, gage height, 7.22 ft; minimum daily discharge, 1.4 ft³/s, June 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	4.2	5.9	8.8	5.3	e4.2	3.1	7.8	21	3.0	99	58
2	4.3	4.1	5.8	8.0	5.2	e4.4	3.2	6.2	23	3.1	98	16
3	4.3	3.9	4.7	7.9	5.0	4.5	3.6	4.7	22	3.5	138	6.7
4	3.9	4.0	4.6	7.6	5.0	4.4	3.3	3.7	18	3.6	121	87
5	9.7	4.1	6.6	6.3	5.0	4.4	3.2	3.1	18	172	100	722
6	25	4.7	7.1	5.8	4.8	4.4	2.9	3.0	23	454	75	306
7	13	4.7	6.1	22	4.7	4.5	3.1	3.0	14	393	66	78
8	7.5	4.7	5.8	12	4.7	4.5	3.2	4.7	15	318	47	17
9	5.9	4.7	5.7	8.2	4.6	4.4	3.2	6.4	15	214	50	5.4
10	5.7	5.4	5.8	7.4	4.5	4.4	3.1	6.8	14	223	29	5.3
11	5.9	11	5.9	7.1	4.7	e4.4	2.9	7.6	12	178	7.9	4.9
12	6.1	6.7	5.7	6.8	4.7	e4.4	2.8	7.7	9.4	154	5.3	4.6
13	7.4	6.1	5.7	6.7	4.7	e4.5	3.2	9.5	8.7	134	5.5	13
14	7.4	5.9	5.9	7.6	4.6	e4.5	3.4	12	8.2	131	38	85
15	7.3	5.4	5.9	22	4.4	4.5	3.5	15	7.8	153	29	67
16	6.3	5.3	6.0	12	4.2	4.4	3.7	18	8.0	124	19	12
17	5.7	5.3	5.9	8.6	4.2	4.3	3.6	14	7.0	140	19	5.6
18	5.4	9.6	6.0	10	4.1	e4.1	3.4	14	5.6	175	12	5.3
19	5.1	8.1	6.0	14	4.1	e4.0	4.2	19	5.1	172	24	5.2
20	4.9	7.9	6.0	8.8	4.2	e3.9	4.9	20	5.7	620	134	5.5
21	4.8	8.9	6.1	7.6	4.1	3.8	5.3	16	5.1	665	76	5.2
22	5.4	8.2	6.3	7.2	4.1	3.7	5.6	13	4.3	566	64	5.0
23	5.7	6.7	6.0	7.3	4.2	3.5	5.1	12	4.3	387	33	5.2
24	5.6	6.7	6.0	7.0	4.0	3.5	4.9	16	4.2	262	91	5.6
25	5.7	6.3	6.0	6.7	e4.0	3.4	5.2	16	3.8	189	77	5.4
26	5.7	6.0	6.0	6.4	e4.0	3.4	6.6	14	3.6	172	26	5.2
27	4.7	6.0	6.3	6.3	e4.1	3.5	9.1	19	3.0	151	7.4	5.0
28	4.0	5.9	6.3	6.0	e4.2	3.4	8.2	40	3.0	130	68	4.9
29	3.9	6.0	6.8	5.5	---	3.3	7.8	22	3.2	110	327	4.6
30	3.7	6.0	7.6	5.3	---	3.4	7.7	20	3.1	98	188	4.5
31	4.0	---	9.5	5.3	---	3.3	---	20	---	118	171	---
TOTAL	198.2	182.5	190.0	268.2	125.4	125.3	133.0	394.2	298.1	6616.2	2245.1	1560.1
MEAN	6.39	6.08	6.13	8.65	4.48	4.04	4.43	12.7	9.94	213	72.4	52.0
MAX	25	11	9.5	22	5.3	4.5	9.1	40	23	665	327	722
MIN	3.7	3.9	4.6	5.3	4.0	3.3	2.8	3.0	3.0	3.0	5.3	4.5
AC-FT	393	362	377	532	249	249	264	782	591	13120	4450	3090

CAL YR 2000 TOTAL 7257.5 MEAN 19.8 MAX 663 MIN 1.9 AC-FT 14400
WTR YR 2001 TOTAL 12336.3 MEAN 33.8 MAX 722 MIN 2.8 AC-FT 24470

e Estimated

15226000 SOLOMON GULCH NEAR VALDEZ

LOCATION.--Lat 61°05'02", long 146°18'13", in NE¹/₄ SE¹/₄ SW¹/₄ sec. 16, T. 9 S., R. 6 W. (Valdez A-7 SE quad), Hydrologic Unit 19020201, at bridge crossing at mouth and 3.8 mi southeast across Port Valdez from Valdez.

DRAINAGE AREA.--19.7 mi²

PERIOD OF RECORD.--July to December 1948, October 1949 to September 1956, and September 1986 to current year.

GAGE.--Nonrecording gage. Elevation of gage is at sea level. July 9, 1948 to May 21, 1950, nonrecording gage, and May 22, 1950 to September 30, 1956, water-stage recorder at about present site and datum.

REMARKS.-- Records fair. Discharge data represent the flow at mouth which includes Solomon Gulch at top of falls (station 15225997), power plant tailrace (station 15225996), and all fish hatchery diversions. Water for power generation is diverted by a dam at Solomon Lake, 0.8 mi upstream. Water is diverted for the fish hatchery by a 24-in. penstock aeration system, and a 24-in. penstock line from the tailrace weir pool. An unaerated penstock and an 8-in. pipe for warm water supply are upstream. Additional water is diverted to the fish hatchery from Solomon Gulch bypass channel about 750 ft above gage, by means of a 12-in. diameter pipe. The fish hatchery discharges water directly into Port Valdez. Average daily diversion to fish hatchery for 2001 water year was 12.4 ft³/s. Power generation began January 6, 1982.

COOPERATION.--Records of daily discharge diverted to the fish hatchery are furnished by Valdez Fisheries Development Association. Copper Valley Electric Association provides tables of hourly power output through the turbines and monthly storage values for Solomon Lake.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	211	78	76	71	91	e98	74	69	221	190	305	272
2	223	89	74	71	81	e97	77	69	218	200	313	229
3	225	80	84	76	79	125	96	70	218	201	347	219
4	222	81	77	87	83	122	92	80	220	199	326	305
5	237	77	85	83	88	121	96	79	224	377	297	944
6	241	79	83	85	111	120	93	79	232	659	290	527
7	215	85	83	99	112	123	88	82	167	552	280	301
8	208	83	82	87	112	95	91	29	207	507	269	222
9	215	79	71	91	118	95	90	9.6	210	387	222	202
10	223	73	70	85	109	97	91	14	208	395	252	216
11	175	79	68	73	97	e97	93	48	213	357	223	220
12	136	77	68	69	99	e100	100	49	167	330	223	221
13	138	82	72	89	88	e116	99	60	211	321	208	230
14	197	76	75	81	94	e118	116	69	212	330	266	251
15	219	72	86	99	100	120	90	81	210	353	257	267
16	229	72	82	76	117	120	77	86	204	327	244	213
17	229	66	82	84	127	115	63	84	203	344	241	214
18	232	72	81	73	123	e120	69	94	204	370	234	204
19	216	75	78	76	126	e104	71	108	205	368	236	196
20	208	70	70	76	103	e98	71	107	210	833	360	174
21	209	72	66	83	94	114	71	571	209	873	303	158
22	211	78	69	81	113	124	75	81	204	772	289	196
23	217	92	68	82	120	117	76	107	205	598	260	200
24	166	80	70	85	117	111	75	225	203	466	316	171
25	165	80	69	79	e124	105	85	223	205	396	291	149
26	121	82	79	78	e118	107	69	221	204	372	244	150
27	70	78	78	97	e96	105	76	217	204	353	235	162
28	74	79	77	98	e91	96	71	237	201	330	298	190
29	77	78	73	110	---	99	68	231	199	316	555	205
30	88	79	80	103	---	74	68	295	194	306	417	208
31	91	---	73	103	---	72	---	221	---	320	394	---
TOTAL	5688	2343	2349	2630	2931	3325	2471	3995.6	6192	12702	8995	7416
MEAN	183	78.1	75.8	84.8	105	107	82.4	129	206	410	290	247
MAX	241	92	86	110	127	125	116	571	232	873	555	944
MIN	70	66	66	69	79	72	63	9.6	167	190	208	149
AC-FT	11280	4650	4660	5220	5810	6600	4900	7930	12280	25190	17840	14710

ADJUSTED FOR CHANGE IN STORAGE IN SOLOMON LAKE

	MEAN	120	31.1	27.0	42.6	20.0	14.6	10.1	188	558	475	292	215
AC-FT	7380	1850	1660	2620	1110	900	600	11530	33180	29190	17940	12810	
CFSM	6.09	1.58	1.37	2.16	1.01	0.74	0.51	9.52	28.30	24.10	14.81	10.93	
IN	7.03	1.76	1.58	2.50	1.06	0.86	0.57	10.99	31.62	27.81	17.09	12.21	

e Estimated

15226000 SOLOMON GULCH NEAR VALDEZ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2001, BY WATER YEAR (WY)#

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	184	102	96.6	97.6	92.9	81.4	72.3	153	182	275	298	344
MAX	310	140	116	138	130	120	106	213	229	410	462	501
(WY)	1987	1989	1987	1995	1987	1987	1998	1993	1990	2001	1993	1989
MIN	97.2	77.1	75.2	73.2	64.3	5.08	26.2	103	145	177	152	152
(WY)	1997	1993	1996	1997	1997	1991	1991	1992	1988	1991	1996	1996
SUMMARY STATISTICS												
	FOR 2000 CALENDAR YEAR					FOR 2001 WATER YEAR			WATER YEARS 1986 - 2001#			
ANNUAL TOTAL	56773					61037.6						
ANNUAL MEAN	155					167			166			
ANNUAL MEAN	*149					*165			*166			
HIGHEST ANNUAL MEAN									197			
LOWEST ANNUAL MEAN									125			
HIGHEST DAILY MEAN	871					Aug 4			2270			
LOWEST DAILY MEAN	a49					Apr 26			1.0			
ANNUAL SEVEN-DAY MINIMUM	55					Apr 25			2.3			
MAXIMUM PEAK FLOW									2270			
ANNUAL RUNOFF (AC-FT)	112600					121100			120300			
ANNUAL RUNOFF (AC-FT)	*108700					*120800			*120300			
ANNUAL RUNOFF (CFSM)	*7.58					*8.43			*8.43			
ANNUAL RUNOFF (IN)	*103.59					*115.08			*114.43			
10 PERCENT EXCEEDS	241					314			294			
50 PERCENT EXCEEDS	128					112			124			
90 PERCENT EXCEEDS	70					72			71			

PRIOR TO CONSTRUCTION OF SOLOMON GULCH HYDROELECTRIC PROJECT

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1956, BY WATER YEAR (WY)#

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	124	58.9	18.3	13.3	10.4	8.82	10.9	102	370	385	322	260
MAX	304	131	35.6	20.9	12.2	11.1	18.3	224	544	514	442	574
(WY)	1953	1953	1950	1956	1954	1953	1953	1953	1953	1955	1956	1951
MIN	48.0	21.7	4.00	1.40	3.57	7.19	6.57	36.5	261	277	254	126
(WY)	1951	1951	1949	1951	1951	1951	1950	1955	1951	1950	1950	1955

SUMMARY STATISTICS

WATER YEARS 1948 - 1956#

ANNUAL MEAN	143	
HIGHEST ANNUAL MEAN	194	1953
LOWEST ANNUAL MEAN	126	1950
HIGHEST DAILY MEAN	1530	Sep 4 1951
LOWEST DAILY MEAN	.50	Dec 31 1950
ANNUAL SEVEN-DAY MINIMUM	1.0	Jan 10 1951
MAXIMUM PEAK FLOW	b2420	Sep 4 1951
MAXIMUM PEAK STAGE	c6.50	Sep 4 1951
INSTANTANEOUS LOW FLOW	d.00	Feb 20 1954
ANNUAL RUNOFF (AC-FT)	103900	
ANNUAL RUNOFF (CFSM)	7.28	
ANNUAL RUNOFF (INCHES)	98.89	
10 PERCENT EXCEEDS	396	
50 PERCENT EXCEEDS	49	
90 PERCENT EXCEEDS	8.0	

See Period of Record and Remarks. Values shown on this page are unadjusted for change in storage in Solomon Lake, unless otherwise noted

* Adjusted for change in storage in Solomon Lake

a Apr. 26 and 28

b From rating curve extended above 620 ft³/s

c Site and datum then in use

d No flow sometime during period Feb. 20 to Mar. 3, 1954, caused by temporary storage upstream

15236900 WOLVERINE CREEK NEAR LAWING

LOCATION.--Lat 60°22'14", long 148°53'48", in NE¹/₄ NE¹/₄ sec. 10, T.3 N., R.3 E. (Seward B-6 quad), Kenai Peninsula Borough, Hydrologic Unit 19020202, on the left bank, about 0.1 mi downstream from terminus of Wolverine Glacier, 2.0 mi upstream from mouth, 16 mi east of Lawing, Alaska.

DRAINAGE AREA.--9.51 mi².

PERIOD OF RECORD.--October 1966 to September 1978, October 1980 to September 1981, May 1997 to September 1997, October 2000 to September 2001.

GAGE.--Water-stage recorder. Elevation of gage is 1,200 ft above sea level from topographic map.

REMARKS.--Records are poor. Large fluctuations from ice melt and alternate damming and storage releases during the melt season. Stream flow modified by Wolverine Glacier, which covers 6.8 mi², more than 70% of the drainage basin. Rain gage and air temperature recorder at station, daily values of precipitation and air temperature available from computer files of the Alaska District. GOES satellite telemetry at station. A recording of air temperature, wind speed, and precipitation gage at 3,250 ft elevation. plus three snow and ice balance measurement sites are located in the basin. Combined snow, ice, and water balances of the basin are published in other reports of the Geological Survey.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 550 ft³/s and maximum (*).

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Jun 1	2330	744	2.88	Jun 9	1645	618	2.69
Jun 2	1445	737	2.87	Jun 10	1045	592	2.65
Jun 3	0430	693	2.81	Jun 15	0315	1170	3.40
Jun 3	1015	3110	4.79	Aug 28	1545	*4160	*5.27
Jun 3	1930	618	2.69				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	1.9	e.10	e.50	.00	.00	.00	e.00	84	295	314	567
2	24	1.6	e.00	e.10	.00	.00	.00	e.00	160	290	315	383
3	17	1.5	e.00	.11	.00	.00	.00	e.00	242	281	e300	295
4	14	e1.4	e.00	.00	.00	.00	.00	e.00	145	278	e300	275
5	28	1.3	e.00	.00	.00	.00	.00	.00	122	283	e300	255
6	64	1.2	e.00	.00	.00	.00	.00	e.00	136	285	e300	187
7	132	1.2	e.00	e.10	.00	.00	.00	e.00	114	290	e300	183
8	93	1.1	e.00	e.10	.00	.00	e.00	.00	123	274	316	146
9	32	1.1	.00	e.10	.00	.00	.00	.01	178	281	316	122
10	15	e1.0	.00	.10	.00	.00	.00	.01	185	270	315	110
11	12	e1.0	.00	.00	.00	.00	.00	.04	149	260	322	109
12	21	e.90	.00	e.00	.00	.00	.00	.36	140	279	337	268
13	36	e.90	.00	e.00	.00	.00	.00	.78	163	280	333	212
14	68	e.80	.00	.00	.00	.00	.00	1.7	226	292	335	158
15	19	e.80	.00	e.10	.00	.00	.00	2.8	243	278	324	134
16	21	e.70	.00	e.20	.00	.00	e.00	6.0	234	279	317	150
17	10	e.70	.00	e.50	.00	.00	e.00	7.1	232	293	310	234
18	7.3	e.60	.00	e1.0	.00	.00	.00	7.9	238	287	325	212
19	6.0	2.6	.00	e8.0	.00	.00	.00	11	264	287	323	186
20	4.8	10	.00	1.0	.00	.00	.00	14	244	268	346	158
21	4.4	44	.00	.13	.00	.00	.00	18	229	264	359	199
22	4.1	3.4	.00	.00	.00	.00	.00	14	263	276	341	147
23	3.9	1.4	.01	.00	.00	.00	.00	10	326	295	361	229
24	3.6	1.1	.33	.00	.00	.00	.00	11	281	313	330	324
25	3.1	.73	1.2	.00	.00	.00	.00	13	293	333	322	156
26	e3.0	e.40	.12	.00	.00	.00	.00	15	292	329	334	112
27	e3.0	e.20	.00	.00	.00	.00	.00	15	271	329	340	89
28	e2.5	e.14	.00	.00	.00	.00	.00	30	250	317	1930	88
29	e2.5	e.10	e10	.00	---	.00	.00	34	254	306	1680	91
30	e2.5	e.10	e3.0	.00	---	.00	.00	30	278	298	1490	57
31	2.2	---	e1.0	.00	---	.00	---	61	---	302	944	---
TOTAL	694.9	83.87	15.76	12.04	0.00	0.00	0.00	302.70	6359	8992	14779	5836
MEAN	22.4	2.80	.51	.39	.000	.000	.000	9.76	212	290	477	195
MAX	132	44	10	8.0	.00	.00	.00	61	326	333	1930	567
MIN	2.2	.10	.00	.00	.00	.00	.00	.00	84	260	300	57
AC-FT	1380	166	31	24	.00	.00	.00	600	12610	17840	29310	11580
CFSM	2.36	.29	.05	.04	.00	.00	.00	1.03	22.3	30.5	50.1	20.5
IN.	2.72	.33	.06	.05	.00	.00	.00	1.18	24.87	35.17	57.81	22.83

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2001, BY WATER YEAR (WY)#

	MEAN	36.2	7.60	2.61	1.50	1.19	.96	1.20	20.0	135	293	345	198
	MAX	114	27.4	5.48	2.71	2.00	2.00	2.27	89.3	262	375	494	351
	(WY)	1970	1971	1970	1970	1970	1970	1981	1967	1967	1967	1981	1974
	MIN	13.1	2.80	.51	.39	.000	.000	.000	.61	31.1	146	176	80.0
	(WY)	1975	2001	2001	2001	2001	2001	2001	1971	1971	1997	1997	1970

See Period of Record; partial years used in monthly statistics
e Estimated

15236900 WOLVERINE CREEK NEAR LAWING--Continued

SUMMARY STATISTICS	FOR 2001 WATER YEAR		WATER YEARS 1967 - 2001#	
ANNUAL TOTAL	37075.27			
ANNUAL MEAN	102		89.2	
HIGHEST ANNUAL MEAN			123	1967
LOWEST ANNUAL MEAN			66.6	1970
HIGHEST DAILY MEAN	1930	Aug 28	1930	Aug 28 2001
LOWEST DAILY MEAN	a.00	Dec 2	a.00	Dec 2 2000
ANNUAL SEVEN-DAY MINIMUM	.00	Dec 2	.00	Dec 2 2000
MAXIMUM PEAK FLOW	b4160	Aug 28	b4160	Aug 28 2001
MAXIMUM PEAK STAGE	5.27	Aug 28	c6.28	Aug 21 1981
ANNUAL RUNOFF (AC-FT)	73540		64590	
ANNUAL RUNOFF (CFSM)	10.7		9.37	
ANNUAL RUNOFF (INCHES)	145.03		127.37	
10 PERCENT EXCEEDS	304		312	
50 PERCENT EXCEEDS	1.4		6.0	
90 PERCENT EXCEEDS	.00		1.0	

See Period of Record; partial years used in monthly statistics
a No flow most days during winter
b From rating curve extended above 1,290 ft³/s
c From floodmarks, date approximate: flow over dense snow

15237730 GROUSE CREEK AT GROUSE LAKE OUTLET NEAR SEWARD

LOCATION.--Lat 60°11'54", long 149°22'24", in NE¹/₄ NE¹/₄ NW¹/₄ sec. 12, T. 1 N., R. 1 W. (Seward A-7 NE quad), Kenai Peninsula Borough, Hydrologic Unit 19020202, on right bank, 200 ft downstream from Grouse Lake outlet, 0.2 mi upstream from Seward Highway, 7 mi north of Seward.

DRAINAGE AREA.--6.22 mi².

PERIOD OF RECORD.--June 1997 to present.

GAGE.--Water stage recorder and crest-stage gage. Elevation of gage is 250 ft above sea level from topographic map.

REMARKS.--No estimated daily discharges. Records good. Rain gage recorder at station. GOES satellite telemetry and phone modem at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	13	27	55	18	14	9.3	35	78	31	11	33
2	7.3	12	19	45	16	12	9.3	33	81	28	10	26
3	7.2	11	19	38	15	11	9.8	31	84	25	10	21
4	7.1	11	18	33	15	11	11	26	78	24	10	19
5	8.1	10	34	25	15	12	9.7	21	69	28	9.9	19
6	10	10	36	21	14	13	9.3	19	65	23	9.5	16
7	14	9.7	31	57	14	13	9.1	20	57	19	9.2	16
8	16	9.4	24	58	13	12	9.1	24	53	18	9.0	14
9	13	10	19	47	12	12	9.1	28	56	17	8.8	13
10	12	27	18	38	11	12	9.2	28	58	16	8.6	13
11	11	49	17	34	12	13	11	29	59	16	8.5	12
12	12	35	15	33	12	16	11	31	55	15	8.2	13
13	11	31	14	30	11	15	11	33	51	15	8.0	25
14	34	34	13	57	9.8	15	10	36	50	15	7.9	34
15	26	27	12	173	11	15	11	41	51	14	7.9	24
16	32	27	11	88	10	15	11	45	53	14	8.3	19
17	31	32	11	74	10	14	12	47	53	13	8.5	18
18	23	49	13	144	9.5	13	12	49	49	12	10	17
19	18	93	12	205	9.7	12	12	51	45	15	9.9	18
20	16	108	14	100	9.4	12	13	58	43	30	17	16
21	15	97	18	70	9.1	12	14	59	41	18	14	14
22	16	94	14	63	8.9	11	15	57	41	17	12	13
23	16	63	13	55	8.2	11	16	55	44	15	11	21
24	14	54	13	47	8.3	11	16	55	44	14	10	52
25	32	46	15	41	9.1	11	18	55	41	13	9.9	40
26	30	39	32	38	9.9	11	21	53	41	13	9.5	33
27	22	33	34	34	19	11	25	52	40	12	9.3	27
28	18	35	34	29	17	10	32	60	39	12	36	22
29	16	39	75	24	---	9.9	35	70	37	11	49	19
30	15	33	97	21	---	10	36	72	34	11	49	17
31	14	---	76	20	---	10	---	75	---	12	42	---
TOTAL	524.4	1141.1	798	1797	336.9	379.9	436.9	1348	1590	536	441.9	644
MEAN	16.9	38.0	25.7	58.0	12.0	12.3	14.6	43.5	53.0	17.3	14.3	21.5
MAX	34	108	97	205	19	16	36	75	84	31	49	52
MIN	7.1	9.4	11	20	8.2	9.9	9.1	19	34	11	7.9	12
AC-FT	1040	2260	1580	3560	668	754	867	2670	3150	1060	877	1280
CFSM	2.72	6.12	4.14	9.32	1.93	1.97	2.34	6.99	8.52	2.78	2.29	3.45
IN.	3.14	6.82	4.77	10.75	2.01	2.27	2.61	8.06	9.51	3.21	2.64	3.85

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2001, BY WATER YEAR (WY)#

	1997	1998	1999	2000	2001
MEAN	19.4	24.9	17.0	20.1	8.67
MAX	25.7	38.0	25.7	58.0	12.0
(WY)	2000	2001	2001	2001	1998
MIN	11.8	12.4	8.89	5.23	3.34
(WY)	1998	2000	1999	1998	1999

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1997 - 2001#
ANNUAL TOTAL	8088.3	9974.1	
ANNUAL MEAN	22.1	27.3	22.4
HIGHEST ANNUAL MEAN			27.3
LOWEST ANNUAL MEAN			16.3
HIGHEST DAILY MEAN	108	Nov 20	205
LOWEST DAILY MEAN	4.1	Sep 9	7.1
ANNUAL SEVEN-DAY MINIMUM	4.6	Sep 4	8.2
MAXIMUM PEAK FLOW			269
MAXIMUM PEAK STAGE			7.32
INSTANTANEOUS LOW FLOW			6.9
ANNUAL RUNOFF (AC-FT)	16040	19780	16230
ANNUAL RUNOFF (CFSM)	3.55	4.39	3.60
ANNUAL RUNOFF (INCHES)	48.37	59.65	48.95
10 PERCENT EXCEEDS	55	55	56
50 PERCENT EXCEEDS	12	17	12
90 PERCENT EXCEEDS	6.2	9.7	5.5

See Period of Record, partial year used in monthly statistics
a Mar. 9 and 10, 1999
b From temporary blockage of channel upstream from gage

15238600 SPRUCE CREEK NEAR SEWARD

LOCATION.--Lat 60°04'10", long 149°27'08", in SW¹/₄ SE¹/₄ sec. 21, T. 1 S., R. 1 W. (Seward A-7 quad), Kenai Peninsula Borough, Hydrologic Unit 19020202, on left bank 0.7 mi upstream from mouth at Resurrection Bay and 2.4 mi south of Seward.

DRAINAGE AREA.--9.26 mi².

PERIOD OF RECORD.--September 1967 to September 1979, annual maximum, water years 1980-90. October 1990 to current year.

REVISED RECORDS.--WDR AK-76-1: 1966-67(M), 1970(M), 1972(M). WDR AK-77-1: 1969(M).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 75 ft above sea level, from topographic map.

REMARKS.--Records good, except January 8 to March 1 and April 25 to June 5, which are fair, and estimated daily discharges and discharges below 7.0 ft³/s, which are poor. Precipitation gage at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 21, 1966, reached a stage of 10.1 ft, from floodmarks; discharge, 3,090 ft³/s, by slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Jul 19	20:00	1,060	6.25	Aug 28	15:30	*1,070	*6.26

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	21	31	48	12	17	3.1	23	190	323	175	232
2	22	19	25	31	11	14	2.8	21	222	309	195	183
3	20	18	27	23	9.7	12	7.7	18	240	267	160	147
4	22	16	25	19	9.2	10	7.4	15	206	222	153	344
5	38	16	87	16	9.0	11	6.3	13	177	318	149	239
6	192	15	55	e14	9.5	13	5.9	12	182	306	164	134
7	195	14	48	e20	9.1	11	5.4	11	170	274	146	109
8	101	14	34	e59	8.7	9.9	4.9	10	156	232	125	96
9	62	16	27	33	8.4	10	4.5	10	190	225	115	80
10	48	107	30	19	7.9	10	4.6	11	230	227	108	69
11	41	132	31	16	7.5	14	11	11	236	283	113	59
12	37	52	29	16	7.2	14	9.1	12	213	280	149	94
13	50	53	23	19	6.7	12	8.7	18	207	245	168	287
14	161	53	21	158	6.2	11	8.3	24	284	227	137	303
15	92	37	19	256	5.9	11	8.0	31	332	247	126	165
16	84	36	18	66	5.7	9.9	7.6	36	346	231	126	123
17	68	72	17	61	5.3	8.9	7.0	38	310	251	121	124
18	53	68	16	130	5.0	8.1	6.6	41	284	254	148	115
19	45	194	29	131	4.9	7.2	6.4	49	242	446	165	106
20	37	233	29	50	5.1	6.5	6.7	65	234	655	413	104
21	33	154	31	37	5.1	5.6	7.3	62	264	347	382	101
22	39	111	23	35	5.1	e5.0	8.3	60	303	294	296	88
23	37	71	21	28	4.9	4.6	9.2	54	469	226	180	290
24	36	56	22	23	4.9	4.1	10	59	600	203	146	276
25	153	45	27	22	5.5	3.7	12	65	506	189	168	140
26	53	36	52	22	8.9	3.8	14	58	633	196	168	98
27	39	31	44	22	30	3.9	15	56	642	197	166	79
28	32	73	36	16	24	3.6	19	85	600	175	518	73
29	28	72	160	14	---	3.5	20	102	501	147	428	68
30	25	43	121	13	---	e3.5	24	104	367	145	470	62
31	23	---	84	12	---	3.3	---	147	---	173	318	---
TOTAL	1890	1878	1242	1429	242.4	265.1	270.8	1321	9536	8114	6396	4388
MEAN	61.0	62.6	40.1	46.1	8.66	8.55	9.03	42.6	318	262	206	146
MAX	195	233	160	256	30	17	24	147	642	655	518	344
MIN	20	14	16	12	4.9	3.3	2.8	10	156	145	108	59
AC-FT	3750	3730	2460	2830	481	526	537	2620	18910	16090	12690	8700
CFSM	6.58	6.76	4.33	4.98	.93	.92	.97	4.60	34.3	28.3	22.3	15.8
IN.	7.59	7.54	4.99	5.74	.97	1.06	1.09	5.31	38.31	32.60	25.69	17.63

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2001, BY WATER YEAR (WY)#

	MEAN	MAX	(WY)	MIN	(WY)
86.2	37.4	16.3	10.6	9.76	4.06
12.7	72.2	203	193	150	170
333	129	51.1	46.1	46.6	15.3
1970	1977	1970	2001	1994	1970
1993	1993	2001	1977	1977	1995
17.0	9.40	3.52	.65	.000	.000
30.6	116	104	56.9	48.8	2000
1997	1974	1997	1974	1972	1971
1972	1971	1972	1971	1972	1971
1972	1997	1969			

See Period of Record, partial year used in monthly statistics
e Estimated

15238600 SPRUCE CREEK NEAR SEWARD--Continued

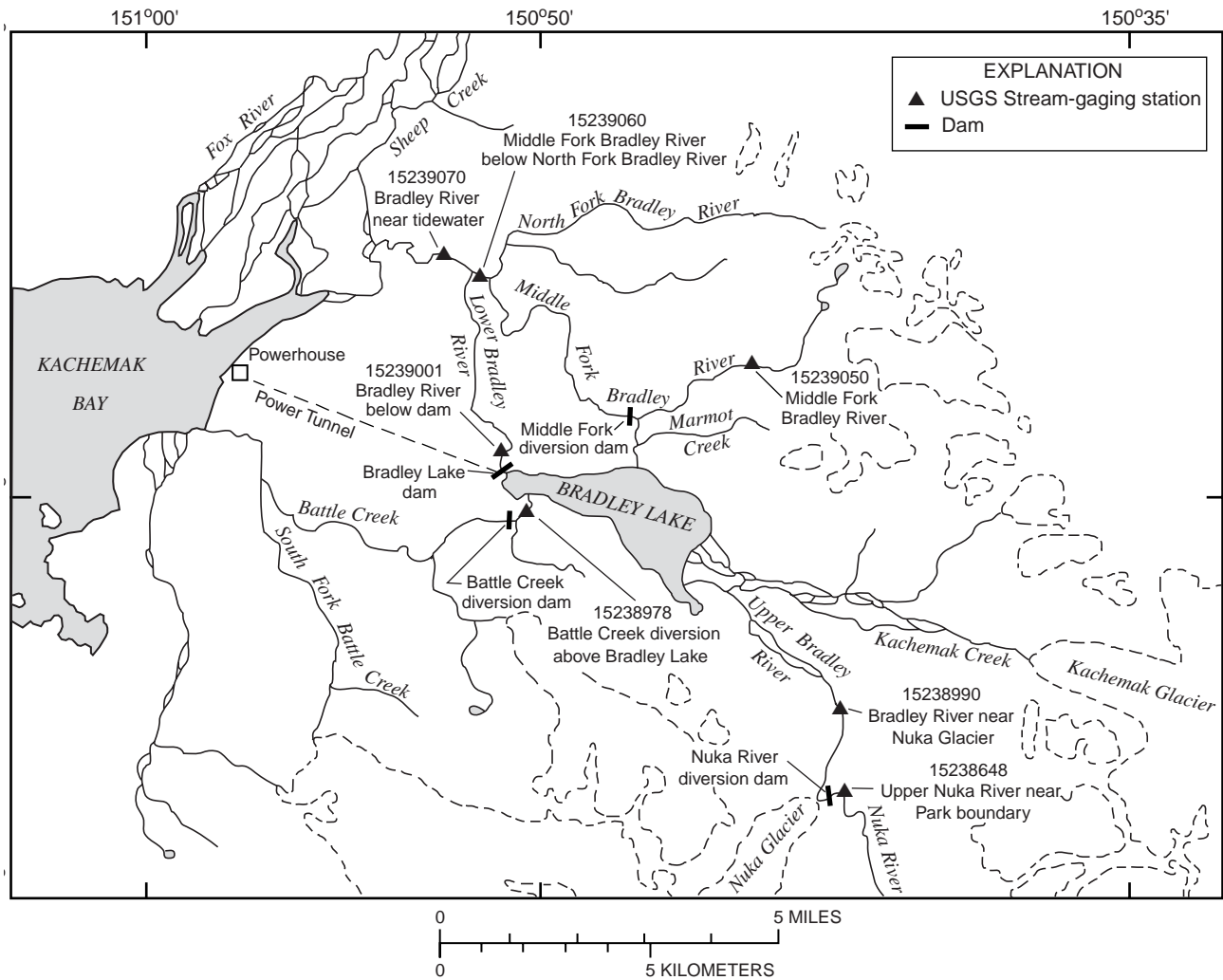
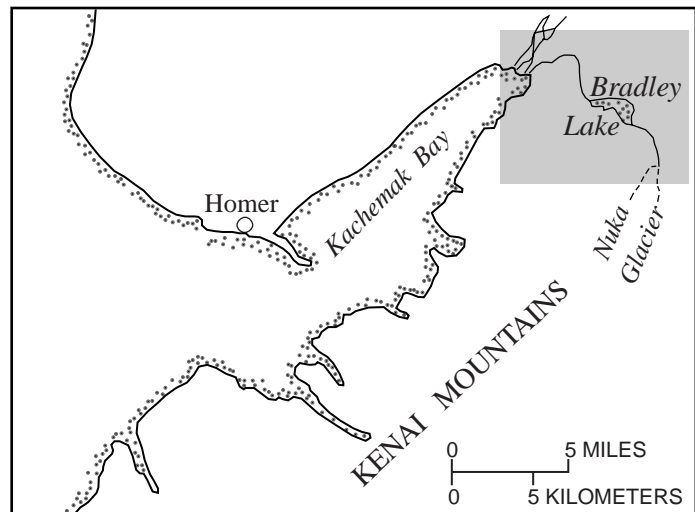
SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1967 - 2001#	
ANNUAL TOTAL	28948.8		36972.3		80.0	
ANNUAL MEAN	79.1		101		123	
HIGHEST ANNUAL MEAN					50.6	
LOWEST ANNUAL MEAN					1650	
HIGHEST DAILY MEAN	697	Aug 2	655	Jul 20		Oct 11 1969
LOWEST DAILY MEAN	2.1	Mar 12	2.8	Apr 2	a.00	Mar 1 1969
ANNUAL SEVEN-DAY MINIMUM	2.8	Mar 8	3.4	Mar 27	.00	Mar 1 1969
MAXIMUM PEAK FLOW			1070	Aug 28	b13600	Oct 11 1986
MAXIMUM PEAK STAGE			6.26	Aug 28	c13.96	Oct 11 1986
INSTANTANEOUS LOW FLOW			2.6	Apr 2	.00	Mar 1 1969
ANNUAL RUNOFF (AC-FT)	57420		73330		57970	
ANNUAL RUNOFF (CFSM)	8.54		10.9		8.64	
ANNUAL RUNOFF (INCHES)	116.30		148.53		117.40	
10 PERCENT EXCEEDS	222		275		210	
50 PERCENT EXCEEDS	38		43		34	
90 PERCENT EXCEEDS	6.0		6.9		1.5	

See Period of Record, partial year used in monthly statistics

a No flow many days in water years 1969, 1971-76, 1992, 1996, and 1999

b Slope-area measurement of the release of water temporarily stored behind a debris-avalanche dam. Inflow into the ponded area was 5,420 ft³/s, from a slope-area measurement made about 0.3 mi upstream at a site with a drainage area of 8.98 mi²

c From floodmarks



Location of the Bradley Lake Hydroelectric Project area.

15238648 UPPER NUKA RIVER NEAR PARK BOUNDARY NEAR HOMER

LOCATION.--Lat 59°41'04", long 150°42'12" (Seldovia C-2 quad), Kenai Peninsula Borough, Hydrologic Unit 19020202, on left bank, 0.4 mi downstream from terminus of Nuka Glacier, 4.9 mi southeast of Bradley Lake, and 29 mi east of Homer, Alaska.

DRAINAGE AREA.--Indeterminate. Prior to July 29, 1990, drainage area was about 3 mi² and varied according to position of glacier terminus.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1980-81, prior to shift in glacier terminus; September 1984 to current year. Records prior to July 29, 1990, are not equivalent. Published as "Upper Nuka River near Homer" prior to October 1989. Low-flow records not equivalent prior to November 1987 because most low-flow measurements were made at site 0.5 mi downstream.

REVISED RECORDS.--WDR AK-89-1: 1985 (M), 1986-88.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,300 ft above sea level, from topographic map.

REMARKS.--Records fair except estimated daily discharges, which are poor. Water is diverted, 300 ft upstream from gage, into Bradley River drainage since July 29, 1990. Precipitation gage and air temperature recorder at station; daily values of precipitation and air temperature are available from the computer files of the Alaska District. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	4.1	e1.6	e.10	e.00	e.00	.00	e.00	e.00	e7.0	3.7	6.9
2	6.4	3.7	e1.4	e.10	e.00	e.00	.00	e.00	e.00	e6.0	3.8	6.5
3	6.3	3.9	e1.2	e.00	e.00	e.00	.00	e.00	e.10	e5.0	3.8	6.2
4	6.3	3.8	e1.0	e.00	e.00	e.00	.00	e.00	e.10	e5.0	3.7	6.8
5	7.0	3.5	e1.0	e.00	e.00	e.00	.00	e.00	e.10	e8.0	3.7	6.7
6	7.5	3.4	e.80	e.00	e.00	e.00	.00	e.00	e.10	e6.0	3.8	6.3
7	7.6	3.3	e.70	e.00	e.00	e.00	.00	e.00	e.10	e6.0	3.7	5.9
8	7.2	3.0	e.60	e.00	e.00	e.00	.00	e.00	e.10	e5.0	3.7	5.2
9	6.9	4.4	e.50	e.00	e.00	e.00	.00	e.00	e.10	e5.0	3.7	4.6
10	6.7	8.0	e.40	e.00	e.00	e.00	.00	e.00	e.10	e5.0	3.8	4.3
11	6.5	7.0	e.40	e.00	e.00	e.00	.00	e.00	e.10	e6.0	4.1	3.9
12	6.2	5.0	e.30	e.00	e.00	e.00	e.00	e.00	e.20	e5.0	4.5	5.3
13	6.4	5.0	e.30	e.00	e.00	e.00	e.00	e.00	e.20	e5.0	4.9	6.9
14	7.6	4.6	e.30	e.20	e.00	e.00	e.00	e.00	e.20	e6.0	5.2	6.7
15	7.0	3.5	e.20	e.30	e.00	e.00	e.00	e.00	e.30	e6.0	5.6	6.3
16	7.0	3.9	e.20	e.30	e.00	e.00	e.00	e.00	e.40	e5.0	6.0	5.9
17	6.6	5.2	e.20	e.20	e.00	e.00	e.00	e.00	e.50	e5.0	6.4	5.7
18	6.1	6.5	e.10	e.20	e.00	e.00	e.00	e.00	e.70	e10	7.1	5.2
19	5.0	7.8	e.10	e.20	e.00	e.00	e.00	e.00	e.90	e200	7.7	4.9
20	3.2	9.2	e.10	e.10	e.00	e.00	e.00	e.00	e1.2	e40	8.9	5.3
21	2.7	7.8	e.10	e.10	e.00	e.00	e.00	e.00	e1.6	4.5	8.4	6.5
22	2.9	6.7	e.00	e.10	e.00	e.00	e.00	.00	e2.1	4.4	7.9	5.9
23	3.3	5.0	e.00	e.00	e.00	e.00	e.00	.00	e3.0	4.3	7.1	6.4
24	2.9	3.7	e.00	e.00	e.00	e.00	e.00	e.00	e4.0	4.0	6.9	6.7
25	6.4	3.2	e.00	e.00	e.00	e.00	e.00	e.00	e5.5	3.9	6.8	5.5
26	4.6	3.0	e.00	e.00	e.00	e.00	e.00	e.00	e7.0	3.9	6.6	4.4
27	3.9	e2.6	e.00	e.00	e.00	e.00	e.00	e.00	e10	3.8	6.5	3.8
28	7.3	e2.4	e.00	e.00	e.00	e.00	e.00	e.00	e15	3.8	8.0	3.6
29	6.7	e2.2	e.40	e.00	---	e.00	e.00	e.00	e10	3.8	8.1	3.6
30	5.6	e2.0	e.30	e.00	---	.00	e.00	e.00	e8.0	3.7	8.1	3.2
31	5.4	---	e.20	e.00	---	e.00	---	e.00	---	3.7	7.6	---
TOTAL	181.8	137.4	12.40	1.90	0.00	0.00	0.00	0.00	71.70	389.8	179.8	165.1
MEAN	5.86	4.58	.40	.061	.000	.000	.000	.000	2.39	12.6	5.80	5.50
MAX	7.6	9.2	1.6	.30	.00	.00	.00	.00	15	200	8.9	6.9
MIN	2.7	2.0	.00	.00	.00	.00	.00	.00	.00	3.7	3.7	3.2
AC-FT	361	273	25	3.8	.00	.00	.00	.00	142	773	357	327

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2001, BY WATER YEAR (WY)#

	MEAN	2.98	1.61	.12	.035	.14	.000	.003	.69	27.5	37.3	17.6	10.4
MAX	5.86	6.45	.83	.16	1.56	.000	.015	2.73	209	272	53.1	31.9	
(WY)	2001	1998	2000	1995	1994	1991	1991	1996	1999	1999	1998	1998	
MIN	.000	.000	.000	.000	.000	.000	.000	.000	1.06	2.96	.97	1.72	
(WY)	1992	1992	1991	1991	1991	1991	1991	1998	1992	1991	1991	1991	

See Period of Record and Remarks. Not adjusted to account for changes in drainage area
e Estimated

15238648 UPPER NUKA RIVER NEAR PARK BOUNDARY NEAR HOMER--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2001, BY WATER YEAR (WY)#

MEAN	2.98	1.61	.12	.035	.14	.000	.003	.69	27.5	37.3	17.6	10.4
MAX	5.86	6.45	.83	.16	1.56	.000	.015	2.73	209	272	53.1	31.9
(WY)	2001	1998	2000	1995	1994	1991	1991	1996	1999	1999	1998	1998
MIN	.000	.000	.000	.000	.000	.000	.000	.000	1.06	2.96	.97	1.72
(WY)	1992	1992	1991	1991	1991	1991	1992	1998	1992	1991	1991	1991

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1991 - 2001#

ANNUAL TOTAL	1189.60	1139.90	
ANNUAL MEAN	3.25	3.12	
HIGHEST ANNUAL MEAN			8.24
LOWEST ANNUAL MEAN			a45.6
HIGHEST DAILY MEAN	17 Aug 14	e200 Jul 19	1.09
LOWEST DAILY MEAN	b.00 Jan 1	c.00 Dec 22	335 Jul 4 1999
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Dec 22	d.00 Nov 3 1990
MAXIMUM PEAK FLOW			.00 Nov 3 1990
MAXIMUM PEAK STAGE			451 Jul 4 1999
ANNUAL RUNOFF (AC-FT)	2360	2260	4.30 Jul 4 1999
10 PERCENT EXCEEDS	7.5	6.9	
50 PERCENT EXCEEDS	1.6	.30	11
90 PERCENT EXCEEDS	.00	.00	.10

PRIOR TO REGULATION AND DIVERSION OF NUKA RIVER

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1989, BY WATER YEAR (WY)#

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	47.6	7.01	2.83	1.48	.49	.21	.22	23.8	34.7	141	180	131
MAX	72.0	24.9	9.00	5.79	2.24	.87	.72	117	81.2	307	432	321
(WY)	1987	1987	1987	1985	1985	1985	1985	1986	1989	1989	1989	1989
MIN	3.84	.024	.000	.000	.000	.000	.000	.016	.76	6.41	12.1	7.08
(WY)	1989	1989	1989	1989	1988	1988	1988	1987	1987	1988	1986	1988

SUMMARY STATISTICS

WATER YEARS 1985 - 1989#

ANNUAL MEAN	47.9
HIGHEST ANNUAL MEAN	96.2
LOWEST ANNUAL MEAN	8.60
HIGHEST DAILY MEAN	1240
LOWEST DAILY MEAN	f.00
ANNUAL SEVEN-DAY MINIMUM	.00
INSTANTANEOUS PEAK FLOW	g1630
INSTANTANEOUS PEAK STAGE	5.47
ANNUAL RUNOFF (AC-FT)	34700
10 PERCENT EXCEEDS	183
50 PERCENT EXCEEDS	1.1
90 PERCENT EXCEEDS	.00

- # See Period of Record and Remarks. Not adjusted to account for changes in drainage area
a Diversion dam failed Jun. 17, 1999; repaired Sep. 25, 1999
b From Jan. 1 to May 11 and Dec. 22 to 28.
c From Dec. 22 - 28, Jan. 3 - 13, and Jan. 23 to Jun. 2
d No flow most days during winter
e Estimated
f No flow many days each year since 1987 during winter through Jun.
See Period of Record for remark on low-flow records
g From rating curve extended above 380 ft³/s

15238978 BATTLE CREEK DIVERSION ABOVE BRADLEY LAKE NEAR HOMER

LOCATION.--Lat 59°44'45", long 150°50'22", in SW¹/₄ NE¹/₄ sec. 17, T. 5 S., R. 9 W. (Seldovia C-3 quad), Kenai Peninsula Borough, Hydrologic Unit 19020301, on right bank 0.6 mi upstream from Bradley Lake and 25 mi east of Homer.

DRAINAGE AREA.--0.95 mi².

PERIOD OF RECORD.--August 1992 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,350 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. The entire flow of Battle Creek at the station has been diverted into Bradley Lake since October 1991.

EXTREMES FOR CURRENT YEAR.-- Peak discharges greater than base discharge of 50 ft³/s and maximums (*).

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jul. 19	1645	*82	*6.63	Sep. 23	1830	50	6.08
Aug. 28	1500	51	6.10				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.54	.08	.05	.17	.00	.00	.00	e.02	3.7	21	11	8.9
2	.51	.04	.00	.02	.00	.00	.00	.01	4.5	18	12	7.0
3	.39	.02	.00	.00	.00	.00	.00	.00	7.4	17	13	6.3
4	.51	.00	.00	.00	.00	.00	.00	.00	6.3	17	12	13
5	1.6	.00	e.05	.00	.00	.00	.00	.00	5.3	18	10	12
6	8.7	.00	e.02	.00	.00	.00	.00	.00	5.3	19	9.6	7.0
7	9.8	.00	e.01	.95	.00	.00	.00	.00	5.1	17	11	5.2
8	4.5	.00	e.01	.59	.00	.00	.00	.00	5.7	15	17	4.0
9	2.9	.06	.00	.11	.00	.00	.00	.00	7.7	16	15	3.0
10	1.9	2.9	.00	.00	.00	.00	.00	.00	11	17	12	2.5
11	1.8	2.3	.00	.00	.00	.00	.00	.01	13	27	8.5	2.1
12	1.6	.84	.00	.00	.00	.00	.00	.09	14	26	9.7	4.5
13	6.4	1.3	.00	.00	.00	.00	.00	.16	13	17	11	18
14	14	1.2	.00	e.02	.00	.00	.00	.25	15	13	20	15
15	4.1	.45	.00	e.02	.00	.00	.00	.43	15	23	25	7.9
16	3.1	.35	.00	e.05	.00	.00	.00	.59	17	24	21	5.9
17	2.3	.31	.00	e.05	.00	.00	.00	.77	16	21	19	6.0
18	1.7	.34	.00	e.04	.00	.00	.00	.74	16	23	19	4.6
19	1.3	2.8	e.01	e.03	.00	.00	.00	.78	16	57	18	4.4
20	1.1	7.6	e.01	e.02	.00	.00	.00	1.0	17	50	28	6.9
21	.45	4.6	e.02	e.01	.00	.00	.00	.99	18	32	12	17
22	.61	2.1	.00	e.01	.00	.00	.00	.95	22	22	9.8	7.0
23	.74	1.0	.00	e.00	.00	.00	.00	1.0	24	16	8.7	22
24	.74	.61	e.02	.00	.00	.00	.00	1.1	25	13	11	28
25	4.5	.32	e.02	.00	.00	.00	.00	1.1	23	11	7.6	11
26	1.7	.10	e.02	.00	.00	.00	.00	1.0	28	10	5.9	7.2
27	.90	.00	e.03	.00	.00	.00	.00	1.0	30	11	5.9	5.3
28	.49	.51	.03	.00	.00	.00	.00	1.5	30	10	23	4.3
29	.32	.77	e1.0	.00	---	.00	.00	2.6	36	9.7	19	3.7
30	.27	.28	e5.0	.00	---	.00	.01	3.6	30	15	27	2.9
31	.18	---	.70	.00	---	.00	---	2.9	---	16	18	---
TOTAL	79.65	30.88	7.00	2.09	0.00	0.00	0.01	22.59	480.0	621.7	449.7	252.6
MEAN	2.57	1.03	.23	.067	.000	.000	.000	.73	16.0	20.1	14.5	8.42
MAX	14	7.6	5.0	.95	.00	.00	.01	3.6	36	57	28	28
MIN	.18	.00	.00	.00	.00	.00	.00	.00	3.7	9.7	5.9	2.1
AC-FT	158	61	14	4.1	.00	.00	.02	45	952	1230	892	501
CFSM	2.70	1.08	.24	.07	.00	.00	.00	.77	16.8	21.1	15.3	8.86
IN.	3.12	1.21	.27	.08	.00	.00	.00	.88	18.80	24.34	17.61	9.89

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2001, BY WATER YEAR (WY)#

	MEAN	MAX	MIN	WY)
1992	2.57	1.06	.19	.041
1993	5.84	2.83	1.22	.19
1994	1994	1998	2000	1995
1995	.21	.009	.000	.000
1996	1997	2000	1996	1996
1997				
1998				
1999				
2000				
2001				

See Period of Record and Remarks, partial years used in monthly statistics
e Estimated

15238978 BATTLE CREEK DIVERSION ABOVE BRADLEY LAKE NEAR HOMER--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1992 - 2001#	
ANNUAL TOTAL	1254.34		1946.22			
ANNUAL MEAN	3.43		5.33		3.86	
HIGHEST ANNUAL MEAN					5.34 1998	
LOWEST ANNUAL MEAN					1.23 1996	
HIGHEST DAILY MEAN	41	Aug 2	57	Jul 19	104	Sep 20 1995
LOWEST DAILY MEAN	a.00	Jan 1	a.00	Nov 4	b.00	Jun 3 1992
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Dec 9	.00	Jan 11 1993
MAXIMUM PEAK FLOW			82	Jul 19	134	Sep 20 1995
MAXIMUM PEAK STAGE			6.63	Jul 19	7.32	Sep 20 1995
MAXIMUM PEAK STAGE					c8.09	May 20 1999
ANNUAL RUNOFF (AC-FT)	2490		3860		2800	
ANNUAL RUNOFF (CFSM)	3.61		5.61		4.06	
ANNUAL RUNOFF (INCHES)	49.12		76.21		55.19	
10 PERCENT EXCEEDS	15		18		13	
50 PERCENT EXCEEDS	.26		.45		.34	
90 PERCENT EXCEEDS	.00		.00		.00	

See Period of Record and Remarks, partial years used in monthly statistics

a No flow many days during the winter

b No flow many days most winters, and Jun. 3, 1992 (observation), Aug. 4, Aug. 5, Aug. 9, and Aug. 14 to Sept. 11, 1996

c Backwater from ice jam

15238990 UPPER BRADLEY RIVER NEAR NUKA GLACIER NEAR HOMER

LOCATION.--Lat 59°42'02", long 150°42'09", (Seldovia C-2 quad), Kenai Peninsula Borough, Hydrologic Unit 19020301, on left bank 1.0 mi downstream from Nuka Glacier terminus, 2.7 mi upstream from confluence with Kachemak Creek, 3.7 mi southeast of Bradley Lake, and 29 mi east of Homer. Prior to July 22, 1991 at site 0.2 mi downstream.

DRAINAGE AREA.--Indeterminate. Prior to July 29, 1990, drainage area was about 10 mi² and varied according to position of glacier terminus.

PERIOD OF RECORD.--October 1979 to current year. Prior to October 1989, published as Upper Bradley River near Homer.

REVISED RECORDS.--WDR AK-86-1: 1980-85, WRD AK-96-1: 1991-95

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,250 ft above sea level, from topographic map. Prior to July 22, 1991 at site 0.2 mi downstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow diverted from Upper Nuka River into Upper Bradley River drainage since July 29, 1990. Air temperature recorder at station, daily values of air temperature available from the computer files of the Alaska District. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	e17	e12	e10	e1.8	e.00	e.00	e.00	e70	758	514	509
2	40	17	e11	e8.0	e1.7	e.00	e.00	e.00	e100	743	537	444
3	32	17	e11	e6.5	e1.6	e.00	e.00	e.00	e130	711	496	396
4	48	e16	e10	e5.5	e1.5	e.00	e.00	e.00	e130	671	468	535
5	129	16	e10	e4.6	e1.0	e.00	e.00	e.00	e110	780	480	517
6	249	e15	e9.0	e4.6	e1.0	e.00	e.00	e.00	e100	901	489	358
7	261	15	e8.0	e4.6	e.50	e.00	e.00	e.00	e90	837	457	283
8	132	15	e7.5	e3.8	e.50	e.00	e.00	e.00	e100	768	451	225
9	68	33	e6.5	e3.4	e.00	e.00	e.00	e.00	e120	755	438	180
10	47	88	e6.0	e2.9	e.00	e.00	e.00	e.00	e140	745	427	161
11	37	46	e5.5	e2.5	e.00	e.00	e.00	e.00	e150	827	456	136
12	33	26	e5.0	e2.2	e.00	e.00	e.00	e.00	e170	874	544	295
13	72	30	e4.6	e2.0	e.00	e.00	e.00	e.00	e180	803	588	528
14	148	27	e4.2	e8.0	e.00	e.00	e.00	e.00	e200	762	564	468
15	74	22	e3.8	e10	e.00	e.00	e.00	e.50	e220	825	592	376
16	68	21	e3.6	e6.5	e.00	e.00	e.00	e.50	e250	851	580	314
17	43	20	e3.2	e6.0	e.00	e.00	e.00	e1.0	e290	893	569	329
18	33	22	e3.0	e8.0	e.00	e.00	e.00	e1.5	e320	915	673	286
19	28	90	e2.8	e6.5	e.00	e.00	e.00	e2.0	e360	1330	723	265
20	26	167	e2.7	e5.5	e.00	e.00	e.00	e3.0	e420	1160	999	356
21	25	79	e2.5	e4.8	e.00	e.00	e.00	e4.0	452	1060	832	456
22	24	45	e2.4	e4.4	e.00	e.00	e.00	e6.0	500	874	762	312
23	23	27	e2.2	e4.0	e.00	e.00	e.00	e8.0	637	709	543	458
24	31	23	e2.1	e5.0	e.00	e.00	e.00	e12	580	619	478	435
25	66	22	e2.0	e3.4	e.00	e.00	e.00	e18	524	569	444	220
26	28	e19	e1.9	e3.0	e.00	e.00	e.00	e24	706	537	411	171
27	24	e17	e1.8	e2.7	e.00	e.00	e.00	e28	889	520	426	136
28	25	e15	e1.8	e2.5	e.00	e.00	e.00	e36	1070	492	886	130
29	19	e13	e20	e2.3	---	e.00	e.00	e42	1010	449	995	128
30	19	e12	e17	e2.1	---	e.00	e.00	e44	885	450	975	103
31	e18	---	e12	e1.9	---	e.00	---	e50	---	480	686	---
TOTAL	1918	992	195.1	147.2	9.60	0.00	0.00	280.50	10903	23668	18483	9510
MEAN	61.9	33.1	6.29	4.75	.34	.0000	.0000	9.05	363	763	596	317
MAX	261	167	20	10	1.8	.00	.00	50	1070	1330	999	535
MIN	18	12	1.8	1.9	.00	.00	.00	.00	70	449	411	103
AC-FT	3800	1970	387	292	19	.00	.00	556	21630	46950	36660	18860

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2001, BY WATER YEAR (WY)#

	MEAN	72.1	15.6	2.78	.56	.42	.000	.078	20.8	220	407	445	357
MAX	213	38.4	19.4	4.75	4.35	.000	.55	93.6	363	763	597	851	
(WY)	1994	1998	2000	2001	1994	1991	1993	1993	2001	2001	1993	1995	
MIN	12.9	2.39	.000	.000	.000	.000	.000	.008	94.4	106	293	117	
(WY)	1997	2000	1995	1991	1991	1991	1992	1998	1999	1999	1998	1992	

See Period of Record and Remarks. Not adjusted to account for changes in drainage area
e Estimated

15238990 UPPER BRADLEY RIVER NEAR NUKA GLACIER NEAR HOMER--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR			FOR 2001 WATER YEAR			WATER YEARS 1991 - 2001#		
ANNUAL TOTAL	33915.30			66106.40					
ANNUAL MEAN	92.7			181			129		
HIGHEST ANNUAL MEAN							181		
LOWEST ANNUAL MEAN							91.1		
HIGHEST DAILY MEAN	1010	Aug	3	1330	Jul	19	a3600	Sep	21 1995
LOWEST DAILY MEAN	b.00	Jan	2	c.00	Feb	9	d.00	Dec	5 1990
ANNUAL SEVEN-DAY MINIMUM	.00	Jan	2	.00	Feb	9	.00	Dec	5 1990
MAXIMUM PEAK FLOW				2050	Jul	19	f4100	Sep	20 1995
MAXIMUM PEAK STAGE				13.85	Jul	19	g15.10	Sep	20 1995
ANNUAL RUNOFF (AC-FT)	67270			131100			93510		
10 PERCENT EXCEEDS	320			672			420		
50 PERCENT EXCEEDS	10			17			5.0		
90 PERCENT EXCEEDS	.00			.00			.00		

PRIOR TO DIVERSION FROM UPPER NUKA RIVER

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1989, BY WATER YEAR (WY)#

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	106	22.8	10.2	4.67	1.74	1.35	1.29	38.3	161	290	349	292
MAX	279	75.7	54.6	15.1	4.82	6.50	4.67	92.0	270	458	595	673
(WY)	1980	1980	1987	1981	1981	1984	1981	1986	1988	1981	1986	1982
MIN	26.3	2.60	.50	.000	.000	.000	.000	.33	102	149	133	63.1
(WY)	1986	1988	1989	1989	1989	1989	1986	1987	1985	1985	1985	1983

SUMMARY STATISTICS

WATER YEARS 1980 - 1989

ANNUAL MEAN	107	
HIGHEST ANNUAL MEAN	154	1986
LOWEST ANNUAL MEAN	49.6	1985
HIGHEST DAILY MEAN	1890	Aug 27 1986
LOWEST DAILY MEAN	d.00	Dec 25 1979
ANNUAL SEVEN-DAY MINIMUM	.00	Dec 25 1979
INSTANTANEOUS PEAK FLOW	h2530	Oct 10 1986
INSTANTANEOUS PEAK STAGE	i9.86	Oct 10 1986
ANNUAL RUNOFF (AC-FT)	77650	
10 PERCENT EXCEEDS	338	
50 PERCENT EXCEEDS	15	
90 PERCENT EXCEEDS	.50	

- # See Period of Record and Remarks. Not adjusted to account for changes in drainage area
a Estimated discharge, but may have been higher during period of no gage-height record, Sep. 21 to Sep. 22, 1995
b From Jan. 2 to May 2
c From Feb. 9 to May 14
d No flow in winter most years
f From rating curve extended above 400 ft³/s on basis of slope-area measurement of peak flow
g From floodmarks
h From rating curve extended above 440 ft³/s on basis of slope-area measurement of peak flow
i Site and datum then in use

15239000 BRADLEY RIVER NEAR HOMER

LOCATION.--Lat 59°45'30", long 150°51'02", in SW¹/₄ SE¹/₄ NW¹/₄ sec. 8, T. 5 S., R. 9 W. (Seldovia D-3 quad), Kenai Peninsula Borough, Hydrologic Unit 19020301, about 1,300 ft downstream from Bradley Lake dam, 3.3 mi upstream from confluence with Middle Fork Bradley River, and 26 mi northeast of Homer.

DRAINAGE AREA.--About 65 mi² since July and August 1990, when additional water was diverted into the basin. Prior drainage area was about 54 mi².

PERIOD OF RECORD.--July to August 1955, October 1957 to September 1990 (discharge). October 1991 to current year (beginning month reservoir contents and monthly discharges).

REVISED RECORDS.--WSP 2136: 1960(M), 1965. WDR AK-77-1: 1958, 1961, 1963(M), 1966, 1967, 1970, 1972, 1974, 1976.

GAGE.--Nonrecording gage. Datum of gage is 1,054.16 ft above sea level (levels of dam-site survey for Alaska Power Authority). Totalizing flow meters on penstocks to two turbines in Bradley powerhouse. Lake-level sensor. July 13-22, 1955, non-recording lake gage at site 1 mi upstream and July 23 to August 5, 1955, at site 3 mi upstream at different datum. Prior to November 4, 1980, and April 29 to October 5, 1986, water-stage recorder at site 500 ft upstream at different datum and November 4, 1980 to April 28, 1986, water-stage recorder 1,300 ft upstream at different datum. April 29, 1986 to September 30, 1989, water-stage recorder at present site and datum.

REMARKS.--Reservoir is formed by an earthen dam with impermeable core and concrete face at the outlet of Bradley Lake. Construction began November 1986 and was completed in April 1991. Total and usable capacities below the spillway crest of 1,180 ft are 547,500 and 284,200 acre-ft, respectively. Reservoir is used for power. Discharge released through turbines is computed using totalizing flow meters; release flow enters Kachemak Bay and is not returned to stream. Spill, dam seepage, and fish-water bypass are measured at Bradley River below Dam (15239001) gage. Reservoir capacity table furnished by the Alaska Energy Authority.

COOPERATION.--Reservoir elevations and power generation discharge provided by the Homer Electric Association, for the Alaska Energy Authority.

AVERAGE DISCHARGE.--42 years (water years 1958 to 1989, and 1992 to current year), 453 ft³/s, 328,200 acre-ft/yr. The inflow diversions from Middle Fork Bradley River and Battle Creek into the reservoir are excluded. Flow diverted from Upper Nuka River into Upper Bradley since July 29, 1990 was not measurable and is included in the following tabulations.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 549,400 acre-ft, October 1, 1991, elevation 1180.5 ft; minimum contents observed, 246,600 acre-ft, April 23, 1997, elevation 1069.3 ft. Maximum computed discharge, 8,800 ft³/s, October 10, 1986, gage height, 10.90 ft from floodmarks, site and datum then in use. Maximum discharge, September 21-22, 1995 was probably higher, as indicated by extremes for period of record on these dates for other sites in the Bradley River basin; minimum daily, about 9.0 ft³/s, December 7, 1986, result of power tunnel construction at dam site.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 534,500 acre-ft, September 26, elevation 1176.7 ft; minimum contents observed, 316,900 acre-ft, May 15, elevation 1106.9 ft.

BEGINNING OF MONTH RESERVOIR ELEVATION, IN FEET ABOVE SEA LEVEL, AND CONTENTS, IN ACRE FEET
WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ELEVATION	CONTENTS	CHANGE IN CONTENTS
Oct 1	1,135.1	393,100	--
Nov 1	1,133.1	386,900	-6,200
Dec 1	1,130.6	379,200	-7,700
Jan 1	1,127.5	369,700	-9,500
Feb 1	1,125.2	362,600	-7,100
Mar 1	1,118.9	346,800	-15,800
Apr 1	1,111.2	327,600	-19,200
May 1	1,108.8	321,600	-6,000
Jun 1	1,109.4	323,100	+1,500
Jul 1	1,126.5	366,600	+43,500
Aug 1	1,150.7	441,500	+74,900
Sep 1	1,173.2	521,400	+79,900
Oct 1	1,175.4	529,400	+8,000
		CAL YR 2000	-37,300
		WTR YR 2001	+136,300

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
MEAN VALUES

MONTH	CHANGE IN CONTENTS	POWER GENERATION	BRADLEY RIVER BELOW DAM 15239001	MIDDLE FORK BRADLEY RIVER 15239050	BATTLE CREEK DIVERSION 15238978	BRADLEY RIVER 15239000
OCT	-101	397	37.0	25.2	2.57	305
NOV	-129	403	25.2	33.6	1.03	264
DEC	-154	342	35.1	10.8	0.23	211
JAN	-116	358	33.8	8.47	0.07	268
FEB	-284	344	36.1	5.61	0.00	89.9
MAR	-312	340	36.8	4.93	0.00	59.5
APR	-101	136	35.3	4.42	0.00	65.5
MAY	+24	220	30.7	7.31	0.73	267
JUN	+731	560	0.40	117	16.0	1,160
JUL	+1,220	574	1.53	221	20.1	1,550
AUG	+1,300	582	21.3	204	14.5	1,680
SEP	+134	965	31.5	102	8.42	1,020
CAL YR 2000	-54	505	37.5	44.6	3.43	442
WTR YR 2001	+184	435	27.0	62.5	5.33	579

15239001 BRADLEY RIVER BELOW DAM NEAR HOMER

LOCATION.--Lat 59°45'30", long 150°51'02", in SW¹/₄ SE¹/₄ NW¹/₄ sec. 8, T. 5 S., R. 9 W. (Seldovia D-3 quad), Kenai Peninsula Borough, Hydrologic Unit 19020301, on right bank about 1,300 ft downstream from Bradley Lake Dam, 3.3 mi upstream from Middle Fork Bradley River, and 26 mi northeast of Homer.

DRAINAGE AREA.--About 66 mi² since October 1991, when additional water was diverted into the basin. Prior drainage area was about 54 mi².

PERIOD OF RECORD.--October 1989 to current year. Prior to 1990 water year, records are equivalent to "Bradley River near Homer" (station no. 15239000).

GAGE.--Water-stage recorder. Datum of gage is 1,054.16 ft above sea level (levels of dam-site survey for Alaska Power Authority).

REMARKS.--No estimated daily discharges. Records fair. Nuka River and Middle Fork Bradley River were diverted into Bradley Lake, upstream from dam, beginning July 29 and August 7, 1990, respectively. Reservoir began filling April 26, 1991. Water has been diverted out of the basin through the turbines since hydro-power generation began on June 28, 1991. Battle Creek was diverted into reservoir in October 1991. Rain gage and air temperature recorder at station, daily values of precipitation and air temperature available from the computer files of the Alaska District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,450 ft³/s September 21, 1990, gage height, 7.11 ft; minimum, 0.00 ft³/s, from rating curve extended below 0.18 ft³/s, most likely ponded water, but no measurable flow, June 9 and June 10, 1997.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 85 ft³/s, August 6, gage height, 3.03 ft; minimum, 0.10 ft³/s, July 13-15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	38	25	35	37	36	38	32	.79	.18	5.7	17
2	44	38	38	37	36	37	39	32	.75	.16	4.8	19
3	42	38	39	40	36	40	39	37	.86	.18	4.8	30
4	38	38	39	41	36	39	36	48	.65	.18	9.4	21
5	39	37	40	41	37	38	36	55	.56	.22	17	6.0
6	39	37	39	38	36	35	36	57	.53	.21	21	13
7	34	43	39	32	36	35	36	73	.44	.36	21	17
8	39	46	35	31	36	36	36	81	.41	.22	21	27
9	38	46	35	30	36	35	36	81	.45	.15	21	27
10	39	35	34	30	36	35	36	81	.43	.15	22	50
11	38	27	36	35	38	35	36	81	.41	.14	36	64
12	38	22	35	37	36	35	36	72	.39	.14	42	56
13	39	25	35	37	36	35	36	65	.36	.12	29	35
14	34	19	38	40	36	35	36	55	.35	.10	15	13
15	28	17	38	41	36	35	37	36	.38	.13	9.2	26
16	27	22	38	38	36	35	37	11	.38	.14	1.5	29
17	39	24	38	39	35	35	37	4.0	.39	.12	14	43
18	39	27	38	40	36	37	36	3.8	.34	.15	17	38
19	38	22	39	35	36	38	36	3.9	.28	.33	25	34
20	38	12	39	28	36	38	36	4.3	.28	6.4	12	49
21	38	11	38	24	36	38	37	3.9	.27	4.6	14	50
22	38	11	38	17	36	38	34	3.8	.26	.32	16	51
23	38	10	38	30	36	38	33	3.9	.74	.33	27	63
24	39	10	38	31	36	38	32	4.0	.22	.94	30	37
25	41	15	33	31	36	38	32	3.9	.19	.31	45	49
26	39	23	31	37	36	38	32	3.8	.20	1.4	56	47
27	38	23	31	30	36	38	32	3.9	.20	2.6	62	19
28	26	20	30	30	36	38	32	4.3	.19	.21	31	5.3
29	26	10	23	30	---	38	32	4.7	.21	5.9	11	5.3
30	31	9.8	20	30	---	38	32	1.9	.17	14	11	5.3
31	38	---	31	34	---	38	---	.72	---	7.0	9.6	---
TOTAL	1146	755.8	1088	1049	1011	1142	1059	951.82	12.08	47.39	661.0	945.9
MEAN	37.0	25.2	35.1	33.8	36.1	36.8	35.3	30.7	.40	1.53	21.3	31.5
MAX	44	46	40	41	38	40	39	81	.86	.14	62	64
MIN	26	9.8	20	17	35	35	32	.72	.17	.10	1.5	5.3
AC-FT	2270	1500	2160	2080	2010	2270	2100	1890	24	94	1310	1880
CAL YR 2000	TOTAL	13735.13	MEAN	37.5	MAX	109	MIN	.10	AC-FT	27240		
WTR YR 2001	TOTAL	9868.99	MEAN	27.0	MAX	81	MIN	.10	AC-FT	19580		

15239050 MIDDLE FORK BRADLEY RIVER NEAR HOMER

LOCATION.--Lat 59°46'42", long 150°45'15", in NW¼ NE¼ sec.2, T.5 S., R.9 W. (Seldovia D-3 quad), Kenai Peninsula Borough, Hydrologic Unit 19020301, on left bank 6.0 mi upstream from mouth and 27 mi east of Homer.

DRAINAGE AREA.--9.25 mi².

PERIOD OF RECORD.--October 1979 to current year. Published as Bradley River tributary near Homer prior to October 1989.

REVISED RECORDS.-- WDR AK-86-1: 1980(P), 1981-82(M), 1984(M). WRD AK-2000-1: 1995-1997.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 2,300 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Precipitation gage and air temperature recorder at station; daily values of air temperature and precipitation are available from the computer files of the Alaska District.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and maximums (*).

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jun 29	0330	368	8.32	Aug 20	0715	334	8.25
Jul 19	2045	*520	*8.59	Aug 28	1530	431	8.44

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	e8.5	e24	e9.0	e6.0	5.1	4.5	4.3	28	226	174	179
2	32	e8.5	e23	e8.0	5.8	5.1	4.7	4.2	38	209	181	156
3	30	e8.0	e20	7.4	5.8	5.1	4.7	4.1	47	193	173	146
4	29	e7.5	e18	7.4	5.9	5.3	4.5	4.0	46	178	162	178
5	38	e7.5	e16	7.2	6.1	5.4	4.5	4.0	40	188	159	186
6	40	e7.0	e16	e10	6.4	5.2	4.5	3.9	39	201	154	134
7	43	e7.0	e14	e12	5.8	5.1	4.4	3.9	37	194	156	106
8	39	e6.5	e12	e9.0	5.7	5.2	4.5	3.8	35	181	159	87
9	34	e6.5	e11	7.3	5.7	5.1	4.6	3.8	41	200	160	75
10	31	e10	e9.5	e6.5	5.7	5.1	4.6	3.8	45	203	156	67
11	28	e11	e8.5	e6.5	5.9	5.1	4.5	e3.8	48	219	146	61
12	26	e10	e8.0	e6.0	5.7	5.0	4.5	e4.0	50	216	154	80
13	31	e9.0	7.4	e6.0	5.6	4.9	4.4	e4.2	52	181	171	118
14	44	e8.0	8.4	e13	5.5	5.0	4.4	e4.4	60	174	203	127
15	35	e7.5	8.3	e14	5.6	5.0	4.4	e4.6	71	193	238	102
16	30	e7.0	7.6	e12	5.6	4.9	4.5	e4.8	89	198	256	88
17	26	e6.5	e7.5	11	5.5	4.9	4.5	e5.0	93	197	250	89
18	23	e6.0	e7.5	13	5.4	4.9	4.5	e5.5	92	203	266	87
19	22	e100	e7.5	9.6	5.4	4.9	4.5	e6.0	93	375	242	88
20	20	e120	e7.0	8.9	5.4	4.8	4.6	e6.5	109	460	305	89
21	e19	e130	e7.0	8.2	5.3	4.8	4.5	e7.0	124	423	254	100
22	18	e110	e7.0	7.4	5.3	4.8	4.2	e7.5	149	322	240	86
23	e16	e90	e7.0	7.4	5.3	4.8	4.2	e8.0	174	259	200	106
24	15	e75	7.1	8.4	5.2	4.8	4.1	e8.5	200	218	172	139
25	e13	e60	6.8	8.3	e5.0	4.7	4.2	e9.0	e230	197	153	94
26	e12	e50	6.7	e8.0	e6.0	4.8	4.2	e10	302	181	133	73
27	e12	e44	e6.5	6.6	5.4	4.7	4.2	11	291	176	129	61
28	e11	e38	e7.0	6.4	5.1	4.6	4.2	14	321	170	290	55
29	e10	e25	e15	e6.0	---	4.6	4.1	19	302	159	312	50
30	e9.5	e24	e12	e6.0	---	4.6	4.3	22	277	164	330	45
31	e9.0	---	e10	e6.0	---	4.6	---	22	---	179	258	---
TOTAL	780.5	1008.0	333.3	262.5	157.1	152.9	132.5	226.6	3523	6837	6336	3052
MEAN	25.2	33.6	10.8	8.47	5.61	4.93	4.42	7.31	117	221	204	102
MAX	44	130	24	14	6.4	5.4	4.7	22	321	460	330	186
MIN	9.0	6.0	6.5	6.0	5.0	4.6	4.1	3.8	28	159	129	45
AC-FT	1550	2000	661	521	312	303	263	449	6990	13560	12570	6050
CFSM	2.72	3.63	1.16	.92	.61	.53	.48	.79	12.7	23.8	22.1	11.0
IN.	3.14	4.05	1.34	1.06	.63	.61	.53	.91	14.17	27.50	25.48	12.27

e Estimated

15239050 MIDDLE FORK BRADLEY RIVER NEAR HOMER--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2001, BY WATER YEAR (WY)#

MEAN	43.8	17.1	8.54	5.76	4.69	3.63	3.31	16.3	95.2	161	145
MAX	144	34.5	33.4	17.0	9.32	7.17	4.42	44.5	162	221	204
(WY)	1987	1980	1987	1981	1981	1981	2001	1990	1998	2001	2001
MIN	15.6	5.29	4.45	3.82	2.86	1.30	2.38	5.45	44.7	111	86.9
(WY)	1997	1985	1985	1991	1991	1986	1999	1987	1985	1996	1996

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1980 - 2001	
ANNUAL TOTAL	16340.7		22801.4			
ANNUAL MEAN	44.6		62.5		51.0	
HIGHEST ANNUAL MEAN					63.8	
LOWEST ANNUAL MEAN					34.6	
HIGHEST DAILY MEAN	389	Aug 3	460	Jul 20	966	Sep 20 1995
LOWEST DAILY MEAN	a2.5	Mar 28	b3.8	May 8	c1.1	Mar 28 1986
ANNUAL SEVEN-DAY MINIMUM	2.6	Mar 27	3.9	May 5	1.1	Mar 28 1986
MAXIMUM PEAK FLOW			520	Jul 19	1470	Sep 20 1995
MAXIMUM PEAK STAGE			8.59	Jul 19	d8.86	Sep 20 1995
MAXIMUM PEAK STAGE			f9.42	Jun 25	g16.16	May 12 1988
ANNUAL RUNOFF (AC-FT)	32410		45230		36950	
ANNUAL RUNOFF (CFSM)	4.83		6.75		5.51	
ANNUAL RUNOFF (INCHES)	65.72		91.70		74.91	
10 PERCENT EXCEEDS	133		197		153	
50 PERCENT EXCEEDS	10		11		12	
90 PERCENT EXCEEDS	3.1		4.5		3.2	

a From Mar. 28 to Apr. 2

b May 8-11

c From Mar. 28 to Apr. 10, 1986

d From recorded range in stage

f Backwater from snow bridge collapse

g Backwater from ice

15239060 MIDDLE FORK BRADLEY RIVER BELOW NORTH FORK BRADLEY RIVER NEAR HOMER

LOCATION.--Lat 59°47'54", long 150°51'48", in SE¹/₄ NE¹/₄ SW¹/₄ sec. 29, T. 4 S., R. 9 W. (Seldovia D-3 quad), Kenai Peninsula Borough, Hydrologic Unit 19020301, on left bank 100 ft upstream from confluence with the main stem Bradley River, 0.2 mi below the mouth of the North Fork Bradley River, 5.5 mi downstream from the Middle Fork Bradley River diversion dam, and 25 mi east of Homer.

DRAINAGE AREA.--24.8 mi².

PERIOD OF RECORD.--August 1996 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 200 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Water from upper Middle Fork Bradley River (15239050) is diverted into Bradley Lake at Middle Fork Bradley River diversion dam, located 5.5 mi upstream. Air temperature recorder at station, daily values of air temperature are available from the computer files of the Alaska District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	33	48	69	23	e10	e8.0	48	252	245	133	115
2	26	32	e46	53	23	e9.5	8.0	40	273	222	137	111
3	26	29	e44	46	22	e9.0	15	34	320	211	132	102
4	25	27	44	39	20	e9.0	12	31	299	188	123	111
5	30	27	92	36	18	e10	11	29	270	218	116	118
6	33	26	86	34	18	e12	10	26	264	240	110	99
7	46	25	69	114	17	e11	9.7	25	239	214	114	93
8	47	25	54	96	e16	e11	9.5	24	217	195	116	82
9	43	30	47	67	16	e10	9.2	25	229	186	112	73
10	40	88	43	49	e15	e11	10	28	242	185	107	66
11	37	90	40	47	15	e13	19	29	253	217	98	60
12	36	68	39	42	e14	e14	18	36	252	206	101	70
13	47	84	35	41	e12	e14	16	48	236	163	110	95
14	119	88	33	113	e11	e14	15	64	230	152	129	111
15	93	69	31	288	e11	e13	16	92	259	188	135	92
16	82	63	30	127	12	e13	15	111	295	191	133	83
17	69	69	28	149	12	13	15	119	304	181	125	78
18	57	73	32	217	11	13	16	120	294	196	130	76
19	49	143	37	155	12	e11	16	128	268	326	115	77
20	43	222	38	97	12	e10	19	156	255	325	157	71
21	37	179	40	76	12	e9.5	22	150	271	249	126	77
22	36	152	35	66	11	e8.5	30	134	295	197	123	67
23	34	105	34	50	e10	e8.5	35	133	302	165	108	102
24	37	84	33	39	e10	e8.5	33	148	304	148	97	204
25	132	67	35	40	e11	e8.5	32	158	286	139	87	141
26	85	51	41	35	e12	e8.5	31	149	298	132	77	111
27	66	47	41	37	e11	e8.5	32	150	329	137	72	94
28	50	86	38	32	e11	e8.5	36	190	340	140	149	85
29	47	91	173	29	---	8.5	38	269	342	136	151	76
30	39	67	176	27	---	8.3	44	266	298	138	160	66
31	38	---	98	25	---	8.2	---	228	---	141	143	---
TOTAL	1576	2240	1660	2335	398	324.5	600.4	3188	8316	5971	3726	2806
MEAN	50.8	74.7	53.5	75.3	14.2	10.5	20.0	103	277	193	120	93.5
MAX	132	222	176	288	23	14	44	269	342	326	160	204
MIN	25	25	28	25	10	8.2	8.0	24	217	132	72	60
AC-FT	3130	4440	3290	4630	789	644	1190	6320	16490	11840	7390	5570
CFSM	2.05	3.01	2.16	3.04	.57	.42	.81	4.15	11.2	7.77	4.85	3.77
IN.	2.36	3.36	2.49	3.50	.60	.49	.90	4.78	12.47	8.96	5.59	4.21

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)#

	MEAN	47.8	51.0	20.7	19.4	11.4	9.95	23.4	110	201	114	51.6	78.4
MAX		75.4	96.3	53.5	75.3	16.7	20.7	36.4	131	277	193	120	116
(WY)		2000	1998	2001	2001	1998	1998	1998	1998	2001	2001	2001	1997
MIN		23.2	16.2	7.69	2.68	2.00	2.74	9.59	97.0	103	45.7	12.5	27.6
(WY)		1997	2000	1997	1999	1999	1999	1999	2000	1997	1997	1996	2000

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR			FOR 2001 WATER YEAR			WATER YEARS 1996 - 2001#		
ANNUAL TOTAL	20544.7			33140.9					
ANNUAL MEAN	56.1			90.8			63.0		
HIGHEST ANNUAL MEAN							90.8		
LOWEST ANNUAL MEAN							44.0		
HIGHEST DAILY MEAN	285			342			626		
LOWEST DAILY MEAN	a3.8			b8.0			c1.0		
ANNUAL SEVEN-DAY MINIMUM	3.9			8.3			1.0		
MAXIMUM PEAK FLOW				d432			d875		
MAXIMUM PEAK STAGE				11.61			13.64		
ANNUAL RUNOFF (AC-FT)	40750			65730			45610		
ANNUAL RUNOFF (CFSM)	2.26			3.66			2.54		
ANNUAL RUNOFF (INCHES)	30.82			49.71			34.49		
10 PERCENT EXCEEDS	146			229			159		
50 PERCENT EXCEEDS	34			64			31		
90 PERCENT EXCEEDS	5.5			11			5.5		

See Period of Record partial years used in monthly statistics

a From Jan. 29 to Feb. 1

b Apr. 1-2

c Feb. 5-12, 1999

d From rating curve extended above 50 ft³/s on basis of comparison of instantaneous discharge of Bradley River below Dam (15239001) and instantaneous discharge of Bradley River near Tidewater (15239070)

e Estimated

15239070 BRADLEY RIVER NEAR TIDEWATER NEAR HOMER

LOCATION.--Lat 59°48'06", long 150°52'58", in SE¹/₄ NE¹/₄ sec. 30, T. 4 S., R. 9 W. (Seldovia D-3 quad), Kenai Peninsula Borough, Hydrologic Unit 19020301, on right bank 0.7 mi upstream from mouth, 0.8 mi downstream from Middle Fork Bradley River, 4.3 mi downstream from Bradley Lake outlet and dam site, and 25 mi east of Homer.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--May 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 25 ft above sea level, from topographic map.

REMARKS.--Records good, except for estimated daily discharges, which are poor. Flow occasionally affected by high tides. Intermittent regulation during construction at the Bradley River dam site began in November 1986. Flow has been regulated since the reservoir began filling April 26, 1991. (See station 15239001.) Upper Nuka River was diverted into Upper Bradley River on July 29, 1990; flow from about 10 mi² of Middle Fork Bradley River upstream drainage has been seasonally diverted into the Bradley Lake reservoir since August 7, 1990. Battle Creek was diverted into the reservoir in October 1990. Water has been diverted out of the basin through the turbines since hydropower generation began June 28, 1991. Rain gage and air temperature recorder at station; daily values of precipitation and air temperature available from the computer files of the Alaska District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	84	e100	95	e65	e48	49	93	238	213	146	138
2	79	81	e95	80	e65	e48	47	83	262	194	150	135
3	76	77	e100	72	e60	e50	66	81	335	187	145	138
4	71	74	107	79	e60	e50	57	84	298	175	135	144
5	79	73	182	e100	e60	e50	55	92	254	195	139	128
6	84	71	163	116	e60	e48	52	90	246	209	135	112
7	96	74	147	161	e59	e48	51	107	221	191	139	113
8	101	79	117	148	e55	e48	51	117	204	180	143	111
9	96	89	103	110	e55	e48	50	110	213	174	137	103
10	93	153	100	95	e55	e48	52	122	220	173	132	121
11	90	146	96	e85	e55	e48	71	123	231	192	136	140
12	89	111	94	e85	e55	e48	66	122	233	185	150	141
13	100	141	87	92	e55	e48	61	129	214	156	145	150
14	176	151	86	228	e55	e48	59	133	210	146	150	134
15	144	105	82	477	e55	e48	58	142	235	173	146	128
16	129	117	79	201	52	e48	58	140	277	176	137	121
17	127	144	79	238	51	e48	57	140	291	169	136	126
18	115	146	84	328	50	e48	57	138	277	179	151	131
19	105	253	100	247	53	e50	57	144	243	338	143	119
20	98	315	103	166	52	e50	61	171	227	323	172	133
21	92	253	109	135	51	e50	67	166	243	224	140	144
22	91	234	104	125	49	e50	77	149	273	196	135	134
23	87	162	89	114	e48	e50	84	148	283	174	132	182
24	93	129	90	100	e48	e50	77	162	283	158	127	242
25	233	102	91	102	e46	e50	75	168	259	150	131	195
26	153	94	108	88	e46	51	72	161	276	141	137	166
27	128	86	112	88	e48	50	74	160	326	150	143	126
28	95	159	102	76	e48	49	80	196	341	149	185	92
29	89	149	284	71	---	48	82	269	344	146	165	82
30	87	104	216	67	---	47	90	262	276	162	175	73
31	92	---	131	67	---	48	---	218	---	159	162	---
TOTAL	3268	3956	3540	4236	1511	1513	1913	4420	7833	5737	4499	4002
MEAN	105	132	114	137	54.0	48.8	63.8	143	261	185	145	133
MAX	233	315	284	477	65	51	90	269	344	338	185	242
MIN	71	71	79	67	46	47	47	81	204	141	127	73
AC-FT	6480	7850	7020	8400	3000	3000	3790	8770	15540	11380	8920	7940

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2001, BY WATER YEAR (WY)#

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	94.4	91.5	64.6	61.9	63.6	53.1	70.7	158	191	147
MAX	145	143	114	137	112	70.5	93.8	205	263	185
(WY)	1992	1998	2001	2001	1994	1998	1993	1992	1998	2001
MIN	64.0	51.2	47.1	41.6	42.2	43.9	50.5	120	114	115
(WY)	1998	2000	1998	1999	1999	1999	1999	1996	1997	1997

See Period of Record and Remarks
e Estimated

15239070 BRADLEY RIVER NEAR TIDEWATER NEAR HOMER--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1992 - 2001#	
ANNUAL TOTAL	39137		46428			
ANNUAL MEAN	107		127		106	
HIGHEST ANNUAL MEAN					127	2001
LOWEST ANNUAL MEAN					83.8	1996
HIGHEST DAILY MEAN					954	Sep 21 1995
LOWEST DAILY MEAN	a44	Nov 20	b46	Jan 15	c40	Dec 15 1992
ANNUAL SEVEN-DAY MINIMUM	45	Jan 10	47	Feb 23	40	Jan 28 1999
MAXIMUM PEAK FLOW			749	Jan 15	1320	Nov 9 1997
MAXIMUM PEAK STAGE			6.82	Jan 15	7.59	Nov 9 1997
MAXIMUM PEAK STAGE			d7.11	Mar 11	d8.80	Dec 22 1999
INSTANTANEOUS LOW FLOW					30	Dec 1 1997
ANNUAL RUNOFF (AC-FT)	77630		92090		76750	
10 PERCENT EXCEEDS	172		233		177	
50 PERCENT EXCEEDS	102		112		89	
90 PERCENT EXCEEDS	47		50		48	

PRIOR TO REGULATION AND DIVERSION OF BRADLEY DAM

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1989, BY WATER YEAR (WY)#

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	808	224	198	145	82.1	74.0	72.8	462	1032	1390	1318	966
MAX	1908	480	503	223	114	163	101	676	1357	1577	1781	1746
(WY)	1987	1984	1987	1985	1985	1984	1989	1987	1988	1988	1988	1989
MIN	363	86.1	78.9	72.5	37.4	27.4	42.5	282	862	1153	907	470
(WY)	1984	1986	1988	1989	1989	1989	1985	1985	1986	1983	1983	1983

SUMMARY STATISTICS WATER YEARS 1983 - 1989#

ANNUAL MEAN	583	
HIGHEST ANNUAL MEAN	722	1987
LOWEST ANNUAL MEAN	475	1985
HIGHEST DAILY MEAN	10000	Oct 11 1986
LOWEST DAILY MEAN	19	Dec 7 1986
ANNUAL SEVEN-DAY MINIMUM	22	Mar 26 1989
MAXIMUM PEAK FLOW	f11000	Oct 11 1986
MAXIMUM PEAK STAGE	g13.73	Oct 11 1986
INSTANTANEOUS LOW FLOW	h17	Mar 28 1989
ANNUAL RUNOFF (AC-FT)	422700	
ANNUAL RUNOFF (CFSM)	7.11	
ANNUAL RUNOFF (IN)	96.67	
10 PERCENT EXCEEDS	1470	
50 PERCENT EXCEEDS	388	
90 PERCENT EXCEEDS	52	

See Period of Record and Remarks

a Jan. 13 to 16

b Feb. 25, 26

c Dec. 15 to Dec. 18, 1992; Apr. 20 to Apr. 21, 1995; Jan. 9 and Apr. 22, 1997; Mar. 5, 1998; Jan. 16 to Jan. 20, and Jan. 28 to Feb. 12, 1999

d Backwater from ice and high tide

f From rating curve extended above 2,400 ft³/s on basis of runoff comparisons with nearby stations

g From floodmarks

h Minimum recorded, but may have been less during period of ice effect, Mar. 28 to Mar. 31, 1989

15241600 NINILCHIK RIVER AT NINILCHIK

LOCATION.--Lat 60°02'56", long 151°39'48", in NE $\frac{1}{4}$ sec. 34, T. 1 S., R. 14 W. (Kenai A-5 quad), Kenai Peninsula Borough, Hydrologic Unit 19020301, on right bank 60 ft downstream from bridge, 0.9 mi upstream from mouth, at Ninilchik.

DRAINAGE AREA.--135 mi² (revised).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1963 to September 1985, October 1998 to September 2001 (discontinued).

GAGE.--Water-stage-recorder. Elevation of gage is 30 ft above sea level, from topographic map. Prior to October 1, 1965, at site 0.2 mi upstream at different datum.

REMARKS.--Records good, except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	e85	e70	e70	e55	e60	e60	556	202	58	72	87
2	94	e80	e70	e70	e55	e60	e60	467	182	57	69	82
3	94	e80	e70	e65	e55	e60	e65	372	163	58	67	87
4	125	e80	e70	e65	e55	e60	e65	281	144	70	80	88
5	168	e80	e70	e65	e55	e65	e65	214	125	91	91	127
6	174	e80	e70	e65	e55	e65	e70	193	113	110	82	116
7	158	e80	e70	e65	e55	e65	e80	193	115	88	73	102
8	167	e80	e70	e65	e55	e65	e90	215	117	76	69	99
9	160	e80	e70	e65	e55	e65	e100	238	108	87	69	88
10	141	e80	e70	e65	e55	e65	e110	297	97	84	68	82
11	130	e85	e70	e65	e55	e65	e130	338	91	90	66	79
12	127	e85	e70	e65	e55	e65	e150	298	89	105	65	76
13	121	e80	e70	e65	e55	e65	e180	265	91	107	63	78
14	132	e80	e70	e65	e55	e65	e200	253	87	94	62	87
15	148	e80	e70	e65	e55	e65	e250	257	82	87	62	91
16	135	e80	e70	e65	e60	e65	e300	254	78	101	64	84
17	125	e80	e70	e65	e60	e60	343	231	75	98	75	85
18	113	e80	e70	e65	e60	e60	371	212	73	82	120	92
19	106	e85	e70	e60	e60	e60	413	208	73	83	138	133
20	101	e85	e75	e60	e60	e60	409	211	72	139	144	174
21	91	e80	e70	e60	e60	e60	503	215	70	141	126	149
22	e85	e80	e65	e60	e55	e60	585	217	68	169	104	129
23	e85	e80	e70	e60	e55	e60	654	201	66	197	85	109
24	e85	e75	e70	e60	e55	e60	653	196	64	155	81	99
25	e90	e75	e70	e60	e60	e60	665	189	63	125	97	95
26	e85	e75	e70	e60	e65	e65	689	191	61	107	94	92
27	e85	e75	e70	e60	e65	e65	668	191	59	89	86	89
28	e85	e75	e70	e55	e60	e65	625	198	58	79	87	86
29	e85	e75	e75	e55	---	e65	567	232	57	74	109	88
30	e85	e70	e70	e55	---	e60	561	292	58	71	103	86
31	e85	---	e70	e55	---	e60	---	257	---	72	96	---
TOTAL	3563	2385	2175	1940	1600	1940	9681	7932	2801	3044	2667	2959
MEAN	115	79.5	70.2	62.6	57.1	62.6	323	256	93.4	98.2	86.0	98.6
MAX	174	85	75	70	65	65	689	556	202	197	144	174
MIN	85	70	65	55	55	60	60	189	57	57	62	76
AC-FT	7070	4730	4310	3850	3170	3850	19200	15730	5560	6040	5290	5870
CFSM	.88	.61	.54	.48	.44	.48	2.46	1.95	.71	.75	.66	.75
IN.	1.01	.68	.62	.55	.45	.55	2.75	2.25	.80	.86	.76	.84

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2001, BY WATER YEAR (WY)#

MEAN	131	97.4	64.0	55.7	57.1	64.6	160	233	119	87.8	89.0	116
MAX	221	314	98.5	86.0	93.9	108	548	488	238	151	155	204
(WY)	1981	1980	1980	1980	1982	1970	1974	1977	1964	1980	1981	1982
MIN	78.2	41.1	42.0	36.8	36.0	36.9	41.4	81.7	62.2	57.6	47.8	54.6
(WY)	1969	1964	1966	1974	1974	1974	1985	1969	1969	1983	1969	1969

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1963 - 2001#	
ANNUAL TOTAL	37709		42687			
ANNUAL MEAN	103		117		107	
HIGHEST ANNUAL MEAN					151	
LOWEST ANNUAL MEAN					55.4	
HIGHEST DAILY MEAN	e650		May 1		1220	
LOWEST DAILY MEAN	a50		Jan 26		30	
ANNUAL SEVEN-DAY MINIMUM	52		Mar 23		32	
MAXIMUM PEAK FLOW			767		1240	
MAXIMUM PEAK STAGE			5.52		6.04	
MAXIMUM PEAK STAGE			Apr 23		c8.69	
ANNUAL RUNOFF (AC-FT)	74800		84670		77210	
ANNUAL RUNOFF (CFSM)	.79		.89		.81	
ANNUAL RUNOFF (INCHES)	10.71		12.12		11.05	
10 PERCENT EXCEEDS	180		213		200	
50 PERCENT EXCEEDS	75		80		76	
90 PERCENT EXCEEDS	55		60		49	

See Period of Record, partial years used in monthly statistics

a From Mar. 26 to 29

b From Jan. 28 to Feb. 15, and Feb. 22 to 24

c Backwater from ice

e Estimated

15241600 NINILCHIK RIVER AT NINILCHIK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1952-53, 1955-58, 1963-65, 1967-68, 1975, 1978-79, and 1998 to September 2001 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: May to September 1963, October 1964 to July 1965, and October 1998 to September 2001.
SEDIMENT: October 1963 to July 1965.

INSTRUMENTATION.--Electronic water temperature recorder set for 15-minute recording interval.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the average for the river by cross sections on February 5, and June 5. No variation was found within the cross sections. No variation was found between mean stream temperature and sensor temperature.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 20.5°C, July 4, 1999; minimum, 0.0°C on many days during fall and winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 20.0°C, June 28 ; minimum, 0.0°C on many days during fall and winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAMPLE LOCA- TION, CROSS SECTION (FT FM L BANK) (00009)	SPECIFIC CONDUCT- TANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAN- DARD UNITS) (00400)	TEMPERA- TURE WATER (DEG C) (00010)	BAROMET- RIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED SATURA- TION (MG/L) (00300)	OXYGEN, DIS- SOLVED (PERCENT TION) (00301)
FEB								
05...	1400	4.00	100	7.2	0	772	11.8	79.7
05...	1401	11.0	100	7.3	0	772	11.8	79.7
05...	1402	18.0	100	7.3	0	772	11.8	79.7
05...	1403	25.0	100	7.3	0	772	11.8	79.7
JUN								
05...	1630	6.00	68	7.9	12.5	762	11.0	103
05...	1631	18.0	68	7.8	12.5	762	10.8	101
05...	1632	30.0	68	7.8	12.5	762	10.8	101
05...	1633	42.0	68	7.8	12.5	762	10.7	100
05...	1634	54.0	68	7.8	12.5	762	10.7	100

DATE	TIME	MEDIUM CODE	SAMPLE TYPE	STREAM WIDTH (FT) (00004)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM- PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	PURPOSE SITE VISIT (CODE) (50280)	QUALITY ASSUR- ANCE DATA INDICA- TOR (CODE) (99111)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPERA- TURE AIR (DEG C) (00020)
OCT													
04...	0900	9	9	42.0	4.23	111	10	3045	1001	--	87	7.4	--
NOV													
06...	1520	9	9	42.0	4.66	80	10	3045	1001	--	89	7.7	--
JAN													
02...	1630	9	9	42.0	--	69	10	3045	1001	--	90	7.3	--
FEB													
05...	1420	9	9	30.0	--	56	10	3045	1001	--	100	7.3	-1.5
MAR													
05...	1450	9	9	28.0	--	67	10	3045	1001	--	108	7.0	4.0
APR													
17...	1220	9	9	53.0	4.81	323	10	3045	1006	--	72	7.7	5.5
20...	1630	9	9	56.0	4.97	412	10	3045	1002	--	62	7.7	8.0
MAY													
08...	1440	9	9	60.5	4.64	220	10	3045	1001	--	57	7.7	2.5
JUN													
05...	1600	9	7	50.0	4.30	123	10	3045	1001	30	68	7.8	14.5
JUL													
11...	1500	9	9	49.0	4.12	92	10	3045	1001	--	94	7.6	13.0
AUG													
06...	1630	9	7	--	4.08	79	10	3045	1001	30	104	7.6	--
22...	1112	D	9	--	--	--	8010	8010	1099	--	--	--	--
22...	1240	9	9	59.0	4.16	102	10	3045	1006	--	94	7.5	17.0
SEP													
05...	1610	9	9	50.0	4.33	157	10	3045	1001	10	95	7.5	--

15241600 NINILCHIK RIVER AT NINILCHIK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

		BARO- METRIC	OXYGEN, DIS- OLVED	HARD- NESS		CALCIUM DIS- SOLVED	MAGNE- SIUM, DIS- SOLVED	SODIUM DIS- SOLVED	ANC WATER UNFLTRD FET FIELD	POTAS- SIUM, DIS- SOLVED	BICARBO NATE WATER DIS IT FIELD	ALKA- LINITY WAT DIS TOT IT FIELD	SULFATE DIS- SOLVED
	TEMP- ERATURE WATER (DEG C) (00010)	PRES- SURE (MMOF HG) (00025)	OXYGEN DIS- OLVED (MG/L) (00300)	(PER- CENT SATUR- ATION) (00301)	TOTAL (MG/L AS CACO3) (00900)	(MG/L AS CA) (00915)	(MG/L AS MG) (00925)	(MG/L AS NA) (00930)	MG/L AS CACO3 (00410)	(MG/L AS K) (00935)	MG/L AS HCO3 (00453)	MG/S AS CACO3 (39086)	(MG/L AS SO4) (00945)
OCT													
04...	3.0	770	13.0	96	30	6.77	3.14	6.3	41	1.98	48	39	.6
NOV													
06...	.00	752	14.2	98	29	6.58	3.02	6.8	41	1.62	48	40	.7
JAN													
02...	.00	755	13.6	94	32	7.14	3.40	6.7	41	1.86	50	41	.7
FEB													
05...	.00	772	11.8	80	37	8.56	3.87	7.5	49	2.03	58	48	.6
MAR													
05...	.00	749	11.2	78	38	8.57	4.01	7.4	51	2.24	60	50	.7
APR													
17...	.5	759	13.5	94	27	6.13	2.74	4.3	31	1.58	37	30	.3
20...	1.5	764	13.4	95	22	5.01	2.30	3.3	28	1.31	33	27	.2
MAY													
08...	5.0	762	12.4	97	19	4.46	1.99	3.9	25	1.46	30	24	.3
JUN													
05...	12.5	762	10.8	101	23	5.30	2.38	4.6	32	1.77	38	31	.5
JUL													
11...	12.5	765	10.8	101	34	7.83	3.61	7.1	44	1.63	51	43	.3
AUG													
06...	16.0	770	9.7	97	37	8.56	3.84	7.2	48	1.85	56	46	.4
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	12.5	755	9.7	92	--	--	--	--	--	--	--	--	--
SEP													
05...	11.5	756	11.0	102	36	8.25	3.73	6.9	42	2.03	51	43	.4

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLOU- RIDE DIS- SOLVED (MG/L AS F) (00950)	SIL- ICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOL- IDS, RISI- DUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOL- IDS, SUM OF CON- STITU- ENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMO- NIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMO- NIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMO- NIA + ORGANIC DIS. TOTAL (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
OCT													
04...	3.6	<.2	28.0	84	75	.003	.083	.049	.49	.19	.182	.066	.058
NOV													
06...	2.8	<.2	30.0	81	76	.002	.081	.037	.18	.16	.070	.051	.045
JAN													
02...	2.6	<.2	31.5	91	80	.002	.129	.039	.21	.19	.075	.055	.048
FEB													
05...	2.6	E.1	32.9	92	88	.003	.132	.057	.24	.19	.073	.052	.051
MAR													
05...	3.3	<.2	32.1	103	89	.002	.138	.059	.29	.20	.093	.059	.052
APR													
17...	1.8	<.2	18.6	66	55	.001	.030	.004	.41	.26	.186	.057	.042
20...	1.9	<.2	15.7	71	47	.003	.024	.004	1.0	.24	.309	.049	.035
MAY													
08...	1.9	<.2	19.8	69	50	.002	.046	.018	.43	.25	.118	.051	.039
JUN													
05...	1.8	<.2	20.5	66	56	.002	.029	.017	.28	.20	.085	.056	.042
JUL													
11...	1.8	E.1	29.0	89	77	.003	.040	.020	.34	.22	.127	.071	.063
AUG													
06...	2.1	<.2	30.0	113	83	.006	.089	.044	.55	.31	.227	.094	.085
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	.004	.051	.029	.41	.30	.147	.083	.064
SEP													
05...	2.9	E.1	29.6	88	80	.004	.054	.022	.45	.25	.173	.085	.076

15241600 NINILCHIK RIVER AT NINILCHIK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CAR- BON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CAR- BON, INOR- GANIC, PAR- TIC. TOTAL (MG/L AS C) (00688)	CAR- BON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	CAR- BON, INORG + ORGANIC PAR- TIC. TOTAL (MG/L AS C) (00694)	NITRO- GEN, PARTIC- ULATE WAT FLT SUSP (MG/L AS N) (49570)	CHLOR-A PERIPH- YTON CHROMO- GRAPHIC FLUO- ROM (MG/M2) (70957)	PERIPH- YTON BIO- MASS ASH WEIGHT G/SQ M (00572)	PERIPH- YTON BIO- MASS TOTAL DRY WEIGHT G/SQ M (00573)	PHEO- PHYTIN A, PERI- PHYTON (MG/M2) (62359)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
OCT 04...	650	115	4.9	<.1	1.4	1.4	.110	--	--	--	--	19	5.7
NOV 06...	480	81.2	3.9	<.1	.2	.2	<.022	--	--	--	--	4	.86
JAN 02...	550	45.2	4.2	<.1	.2	.3	.037	--	--	--	--	4	.75
FEB 05...	610	99.6	3.6	<.1	.2	.2	<.022	--	--	--	--	6	.91
MAR 05...	680	116	3.7	<.1	.4	.4	.036	--	--	--	--	8	1.4
APR 17...	1250	136	7.4	--	--	1.7	.148	--	--	--	--	70	61
20...	1070	172	7.4	--	--	9.0	.668	--	--	--	--	164	182
MAY 08...	620	42.1	6.5	--	--	1.5	.113	--	--	--	--	33	20
JUN 05...	500	70.0	6.0	--	--	1.0	.065	--	--	--	--	16	5.3
JUL 11...	600	86.5	5.7	--	--	1.3	.105	--	--	--	--	19	4.7
AUG 06...	850	81.1	6.0	--	--	E1.4	E.110	--	--	--	--	19	4.1
22...	--	--	--	--	--	--	--	.5	38.5	39.4	.3	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 05...	780	70.7	6.5	--	--	3.0	.244	--	--	--	--	40	17

DATE	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 04...	75
NOV 06...	--
JAN 02...	97
FEB 05...	89
MAR 05...	78
APR 17...	53
20...	60
MAY 08...	70
JUN 05...	72
JUL 11...	80
AUG 06...	80
22...	--
22...	--
SEP 05...	74

15241600 NINILCHIK RIVER AT NINILCHIK--Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	3.5	1.0	2.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2	3.0	2.0	2.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
3	3.5	2.5	3.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4	4.0	3.0	3.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
5	5.0	3.5	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6	5.0	4.0	4.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	5.5	4.0	5.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8	5.0	4.0	4.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
9	4.5	3.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	3.0	1.5	2.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11	3.0	1.0	2.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	3.0	1.5	2.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13	2.0	.5	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
14	3.5	2.0	2.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
15	2.5	2.0	2.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
16	3.0	2.0	2.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
17	3.0	1.5	2.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
18	2.5	1.0	2.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19	2.0	1.0	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
20	1.5	.5	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
21	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
22	1.0	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
23	1.0	.5	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
24	1.5	.5	1.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
25	2.0	1.0	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
26	1.5	.5	1.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
27	1.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
28	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
29	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
30	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
31	.0	.0	.0	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	5.5	.0	1.9	.0	.0	.0	.0	.0	.0	.0	.0	.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	.0	.0	.0	.0	.0	.0	1.0	.0	.0	4.0	2.0	3.0
2	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.0	2.0	3.0
3	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.0	1.5	3.0
4	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.5	1.5	2.5
5	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.5	.5	2.0
6	.0	.0	.0	.0	.0	.0	.0	.0	.0	5.0	2.0	3.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	6.5	2.5	4.0
8	.0	.0	.0	.0	.0	.0	.5	.0	.0	7.0	3.0	4.5
9	.0	.0	.0	.0	.0	.0	.0	.0	.0	5.0	3.0	3.5
10	.0	.0	.0	.0	.0	.0	.0	.0	.0	5.5	2.0	3.5
11	.0	.0	.0	.0	.0	.0	1.0	.0	.0	6.5	2.5	4.5
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	7.5	3.5	5.5
13	.0	.0	.0	.0	.0	.0	.0	.0	.0	8.0	4.0	6.0
14	.0	.0	.0	.0	.0	.0	.5	.0	.0	9.0	4.5	6.5
15	.0	.0	.0	.0	.0	.0	.0	.0	.0	8.0	6.0	7.0
16	.0	.0	.0	.0	.0	.0	.0	.0	.0	7.0	5.0	6.0
17	.0	.0	.0	.0	.0	.0	.5	.0	.0	8.0	4.5	6.0
18	.0	.0	.0	.0	.0	.0	1.0	.0	.0	9.0	4.5	7.0
19	.0	.0	.0	.0	.0	.0	1.0	.0	.0	10.0	5.5	7.5
20	.0	.0	.0	.0	.0	.0	1.5	.0	.5	9.0	6.5	8.0
21	.0	.0	.0	.0	.0	.0	2.0	.5	1.0	8.0	6.5	7.0
22	.0	.0	.0	.0	.0	.0	2.5	.5	1.5	9.0	5.5	7.0
23	.0	.0	.0	.0	.0	.0	2.0	.0	1.0	9.0	5.5	7.0
24	.0	.0	.0	.0	.0	.0	3.0	.0	1.5	7.0	5.0	6.0
25	.0	.0	.0	.0	.0	.0	3.5	.5	1.5	6.5	4.5	5.5
26	.0	.0	.0	.0	.0	.0	3.0	1.0	2.0	6.5	5.0	5.5
27	.0	.0	.0	.0	.0	.0	2.5	.5	1.5	10.0	4.0	7.0
28	.0	.0	.0	.0	.0	.0	2.5	1.0	2.0	12.0	7.0	9.5
29	---	---	---	.0	.0	.0	4.5	1.0	2.5	11.5	8.5	10.0
30	---	---	---	.0	.0	.0	5.0	2.0	3.5	12.0	7.5	9.5
31	---	---	---	.0	.0	.0	---	---	---	12.5	8.0	10.5
MONTH	.0	.0	.0	.0	.0	.0	5.0	.0	.6	12.5	.5	5.8

15243900 SNOW RIVER NEAR SEWARD

LOCATION.--Lat 60°17'42", long 149°20'38", in NE¹/₄ SW¹/₄ sec. 6, T. 2 N., R. 1 E. (Seward B-7 quad), Kenai Peninsula Borough, Hydrologic Unit 19020302, on left bank, 0.5 mi below the Alaska Railroad bridge, 3.0 mi upstream from the mouth at Kenai Lake, and 13.5 mi north of Seward.

DRAINAGE AREA.--128 mi² (revision pending).

PERIOD OF RECORD.--August to September of 1970, 1974, 1977 and April 1997 to current year.

GAGE.--Water stage recorder. Elevation of gage is 470 ft above sea level, from topographic map. Prior to April 9, 1998 at site 0.5 mi upstream at different datum.

REMARKS.--Records fair, except estimated daily discharges which are poor. Rain gage at station. GOES satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Glacier-dammed lake outburst flood about August 31, 1967, 55,000 ft³/s from rating curve extended above 27,000 ft³/s, gage-height 42.60 ft from floodmarks, site and datum then in use.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	596	244	e250	620	e160	e130	e110	316	1470	3480	2750	4150
2	537	230	e200	538	e160	e130	e110	304	1680	3460	2980	3290
3	493	216	e220	447	e150	e130	e120	296	2010	3360	2910	3040
4	458	153	400	371	e150	e130	e120	209	2000	3030	2770	3110
5	477	216	494	e280	e150	e130	e110	e140	1780	3220	2780	3210
6	672	198	428	e300	e150	e120	e110	e130	1660	3150	2780	2700
7	1190	190	367	e450	e150	e120	e110	e110	1490	2900	2540	2500
8	1370	171	210	499	e150	e120	e110	e120	1330	2820	2360	2270
9	760	173	e200	421	e150	e120	e110	182	1480	2660	2300	2130
10	599	311	e230	294	e150	e120	e110	196	1650	2630	2200	2120
11	524	466	257	e200	e150	e120	e120	254	1680	2520	2220	2210
12	494	331	152	e200	e150	e120	e120	322	1600	2690	2580	3530
13	474	368	e160	e200	e150	e120	e120	356	1610	2890	2890	5100
14	1290	393	e160	505	e150	e120	e110	408	1680	2780	2860	5520
15	739	302	e160	1190	e150	e120	e110	475	2100	2790	2680	5740
16	785	321	e160	694	e150	e120	e110	539	2570	2610	2650	6830
17	734	341	e160	751	e150	e120	e110	535	2850	2790	2500	8870
18	569	406	e160	1540	e150	e120	e110	537	2900	2990	2670	11200
19	479	510	e160	2030	e140	e120	e110	559	2910	3310	2550	12700
20	420	632	146	886	e140	e120	e110	713	2790	4630	4290	13500
21	380	873	303	658	e130	e120	e110	845	2630	4580	4250	13500
22	386	726	e160	578	e130	e120	e110	769	2840	4660	3740	13400
23	365	545	e160	518	e130	e110	e110	634	3600	4340	2980	9040
24	334	502	e180	434	e130	e110	e110	589	3460	3650	2570	6800
25	449	453	354	381	e130	e110	e110	571	3320	3280	2420	3410
26	384	372	388	332	e130	e110	e110	559	3950	3110	2430	2300
27	340	302	370	252	e160	e110	e130	549	4320	3100	2520	1710
28	302	399	366	e180	e130	e110	145	698	4430	2960	6520	1560
29	285	396	845	e170	---	e100	221	927	4270	2680	7500	1440
30	282	309	1020	e170	---	e110	284	1100	3840	2520	7050	1060
31	265	---	804	e170	---	e110	---	1290	---	2630	5880	---
TOTAL	17432	11049	9624	16259	4070	3670	3690	15232	75900	98220	102120	157940
MEAN	562	368	310	524	145	118	123	491	2530	3168	3294	5265
MAX	1370	873	1020	2030	160	130	284	1290	4430	4660	7500	13500
MIN	265	153	146	170	130	100	110	110	1330	2520	2200	1060
AC-FT	34580	21920	19090	32250	8070	7280	7320	30210	150500	194800	202600	313300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2001, BY WATER YEAR (WY)#

MEAN	983	322	204	201	117	108	178	713	2228	3163	3016	3369
MAX	2506	514	312	524	188	220	277	841	2530	3281	5598	6294
(WY)	1999	1998	2000	2001	1998	1998	1998	2000	2001	1998	1977	1974
MIN	279	188	87.3	57.0	42.0	39.2	81.8	491	1780	2866	1764	1157
(WY)	1998	2000	1999	1999	1999	1999	1999	2001	1999	1999	1998	2000

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR			FOR 2001 WATER YEAR			WATER YEARS 1970 - 2001#		
ANNUAL TOTAL	357799			515206			1114		
ANNUAL MEAN	978			1412			1412		
HIGHEST ANNUAL MEAN							2001		
LOWEST ANNUAL MEAN							2000		
HIGHEST DAILY MEAN	4620	Jul 17		ab13500	Sep 20		b23800	Sep 20	1974
LOWEST DAILY MEAN	43	Mar 31		100	Mar 29		c36	Mar 3	1999
ANNUAL SEVEN-DAY MINIMUM	44	Mar 27		109	Mar 23		37	Feb 26	1999
MAXIMUM PEAK FLOW				b14900	Sep 22		b26400	Sep 20	1974
MAXIMUM PEAK STAGE				12.20	Sep 22		d40.75	Sep 20	1974
INSTANTANEOUS LOW FLOW							36	Mar 3	1999
ANNUAL RUNOFF (AC-FT)	709700			1022000			807100		
10 PERCENT EXCEEDS	2890			3380			3490		
50 PERCENT EXCEEDS	451			453			672		
90 PERCENT EXCEEDS	69			120			71		

See Period of Record, partial years used in monthly summary statistics

a Sept. 20 and Sept. 21

b Result of release of stored water from glacier-dammed lake

c Mar. 3 and Mar. 4, 1999

d Site and datum then in use

e Estimated

15258000 KENAI RIVER AT COOPER LANDING

LOCATION.--Lat 60°29'34", long 149°48'28", in SE¹/₄ sec. 28, T. 5 N., R. 3 W. (Seward B-8 quad), Kenai Peninsula Borough, Hydrologic Unit 19020302, Chugach National Forest, on right bank 10 ft downstream from bridge on Sterling Highway, 0.9 mi upstream from Bean Creek, 0.9 mi east of Cooper Landing, and at Kenai Lake outlet.

DRAINAGE AREA.--634 mi².

PERIOD OF RECORD.--May 1947 to current year.

REVISED RECORDS.--WSP 2136: 1964 (M).

GAGE.--Water-stage recorder. Datum of gage is 419.92 ft above sea level (levels by Alaska Department of Transportation). See WSP 2136 for history of changes prior to August 28, 1965. August 28, 1965 to January 21, 1974, at site 10 ft upstream at present datum. January 22, 1974 to September 30, 1981, non-recording gage at site 40 ft upstream at present datum.

REMARKS.--No estimated daily discharges. Records good. Diversion from Cooper Lake to Kenai Lake above gage through Cooper Lake power plant began May 1961. No diversions occurred from October 2000 to February 2001. Rain gage at station. GOES satellite telemetry and telephone modem at station.

COOPERATION.--Records of diversion provided by Chugach Electric Association.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2980	1610	1370	1270	1830	791	605	944	3950	12400	8140	12100
2	2820	1550	1330	1290	1730	779	616	998	4350	12100	8000	11300
3	2690	1490	1310	1310	1650	773	630	1040	4830	11700	7930	10400
4	2570	1460	1280	1320	1580	775	618	1080	5290	11300	7840	9610
5	2450	1400	1290	1300	1520	756	624	1110	5630	10900	7730	8920
6	2370	1360	1300	1300	1440	746	639	1140	5840	10700	7670	8420
7	2370	1300	1300	1370	1360	745	639	1150	6010	10500	7540	7840
8	2460	1280	1280	1450	1310	748	643	1170	6010	10200	7280	7330
9	2480	1260	1280	1470	1240	725	651	1180	6040	9920	7060	6760
10	2480	1250	1270	1460	1220	722	664	1200	6160	9640	6910	6250
11	2400	1240	1260	1460	1200	717	667	1210	6330	9360	6690	5810
12	2340	1240	1220	1440	1140	703	665	1250	6510	9090	6600	5600
13	2300	1290	1190	1410	1090	699	668	1290	6600	8910	6610	5800
14	2320	1300	1150	1430	1070	699	673	1340	6730	8750	6790	6160
15	2370	1300	1130	1620	1040	686	682	1410	6950	8650	6880	6380
16	2390	1300	1090	1770	1020	675	680	1500	7390	8500	6890	6620
17	2430	1300	1100	1860	969	668	685	1600	7880	8400	6900	7040
18	2420	1320	1090	2080	932	651	694	1710	8370	8450	6920	7790
19	2390	1350	1070	2600	911	642	704	1840	8760	8570	6930	8870
20	2310	1380	1050	2900	879	638	719	2000	9070	9080	7020	10400
21	2250	1440	1030	3040	849	630	727	2170	9240	9750	7530	12300
22	2170	1530	1010	3060	826	620	737	2330	9360	10300	7900	14700
23	2110	1570	1000	3000	806	612	749	2490	9720	10700	7970	15000
24	2070	1580	988	2910	786	605	758	2600	10400	10700	7730	13900
25	2030	1560	975	2730	784	595	776	2690	10900	10500	7380	12600
26	1990	1540	982	2600	786	597	787	2770	11400	10200	7040	11100
27	1900	1510	981	2420	806	592	809	2820	11900	9890	6800	9740
28	1840	1510	985	2290	796	588	836	2940	12500	9560	7250	8600
29	1790	1470	1010	2170	---	587	863	3140	12900	9220	9420	7680
30	1700	1430	1110	2030	---	590	902	3330	12700	8800	11200	6880
31	1660	---	1210	1910	---	593	---	3590	---	8440	12200	---
TOTAL	70850	42120	35641	60270	31570	20947	21110	57032	239720	305180	236750	271900
MEAN	2285	1404	1150	1944	1128	676	704	1840	7991	9845	7637	9063
MAX	2980	1610	1370	3060	1830	791	902	3590	12900	12400	12200	15000
MIN	1660	1240	975	1270	784	587	605	944	3950	8400	6600	5600
MED	2370	1390	1130	1770	1060	675	681	1500	7170	9750	7280	8510
AC-FT	140500	83550	70690	119500	62620	41550	41870	113100	475500	605300	469600	539300
CFSM	3.60	2.21	1.81	3.07	1.78	1.07	1.11	2.90	12.6	15.5	12.0	14.3
IN.	4.16	2.47	2.09	3.54	1.85	1.23	1.24	3.35	14.07	17.91	13.89	15.95

ADJUSTED TO EXCLUDE DIVERSION FROM COOPER LAKE

MEAN	2285	1404	1150	1943	1128	482	568	1606	7683	9605	7518	8924
CFSM	3.60	2.21	1.81	3.06	1.78	0.76	0.90	2.53	12.12	15.15	11.86	14.08
IN	4.15	2.47	2.09	3.53	1.85	0.88	1.00	2.92	13.52	17.47	13.67	15.70
AC-FT	140500	83550	70690	119500	62620	29630	33790	98720	457200	590590	462260	531020

15258000 KENAI RIVER AT COOPER LANDING--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2001, BY WATER YEAR (WY)#

MEAN	3271	1798	1129	814	653	512	546	1907	5413	7006	6381	5308
MAX	8955	4877	3469	2807	2066	1122	1071	3508	10010	10480	11430	11490
(WY)	1980	1958	1986	1981	1981	1977	1980	1990	1953	1980	1977	1967
MIN	1264	654	364	310	251	208	262	658	3268	4868	3651	2629
(WY)	1956	1951	1951	1951	1949	1951	1952	1952	1972	1996	1969	1969

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1947 - 2001#	
ANNUAL TOTAL	972220		1393090			
ANNUAL MEAN	2656		3817		2913	
ANNUAL MEAN	*2631		*3702		*2840	
HIGHEST ANNUAL MEAN					4499	
LOWEST ANNUAL MEAN					2102	
HIGHEST DAILY MEAN	8590	Jul 18	15000	Sep 23	22500	Sep 21 1974
LOWEST DAILY MEAN	523	Apr 14	587	Mar 29	100	Mar 28 1964
ANNUAL SEVEN-DAY MINIMUM	531	Apr 9	592	Mar 25	190	Mar 15 1951
MAXIMUM PEAK FLOW			a15700	Sep 22	a23100	Sep 21 1974
MAXIMUM PEAK STAGE			a14.78	Sep 22	17.18	Sep 21 1974
INSTANTANEOUS LOW FLOW			578	Mar 29	b.00	Mar 27 1964
ANNUAL RUNOFF (AC-FT)	1928000		2763000		2110000	
ANNUAL RUNOFF (AC-FT)	*1905060		*2680070		*2058000	
ANNUAL RUNOFF (CFSM)	*4.15		*5.84		*4.48	
ANNUAL RUNOFF (INCHES)	*56.32		*79.25		*60.83	
10 PERCENT EXCEEDS	6790		9730		6980	
50 PERCENT EXCEEDS	1520		1710		1650	
90 PERCENT EXCEEDS	656		699		412	

- # See Period of Record and Remarks; partial years used in monthly statistics.
 Values shown on this page are unadjusted for inflow from diversion, unless otherwise noted
- * Adjusted to account for inflow from diversion, see Remarks
- a Result of release of stored water from glacier-dammed lake at head of unnamed glacier in the Snow River Basin
- b No flow, Mar. 27 and Mar. 28, 1964, caused by earthquake

15261000 COOPER CREEK AT MOUTH NEAR COOPER LANDING

LOCATION.--Lat 60°28'50", long 149°52'50", in NW¹/₄ SW¹/₄ sec. 31, T. 5 N., R. 3 W. (Seward B-8 quad), Hydrologic Unit 19020302 Kenai Peninsula Borough, on left bank, approximately 0.5 mi upstream from mouth, and 1.5 mi west of Cooper Landing.

DRAINAGE AREA.--48.6 mi².

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1957 to January 1965, August 1998 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 450 ft above sea level, from topographic map. From October 1957 to January 1965, 0.4 mi upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Since July 1959, entire flow from 31.8 mi² of drainage area has been regulated by dam at Cooper Lake outlet. No spilling since 1959 except for period May 1961 to October 1962. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	e25	e32	27	17	e10	e7.0	31	154	158	97	75
2	33	e24	e30	e26	e17	e9.5	e7.5	28	170	151	95	71
3	32	23	e30	e25	e16	e9.5	e7.5	26	184	154	96	69
4	32	e22	e30	e23	e16	e9.5	e7.5	24	158	151	93	70
5	34	e22	e30	e22	e15	e9.5	e7.5	22	149	152	90	73
6	35	21	e29	e20	e15	9.3	e7.5	21	146	153	85	66
7	38	21	27	e18	e14	9.1	e8.0	21	138	152	81	65
8	37	23	27	e17	e14	9.0	e8.0	24	132	154	80	60
9	34	23	e25	e15	e13	9.1	e8.0	27	140	145	78	55
10	33	29	e24	e15	e13	9.3	e8.0	30	149	141	74	53
11	33	31	e23	e14	e12	9.7	e8.0	35	152	143	71	50
12	32	e30	22	e13	e12	9.7	e8.5	40	150	140	71	50
13	31	29	21	e13	e12	10	8.6	45	150	124	73	51
14	39	29	21	e12	e12	9.6	9.0	53	151	117	77	48
15	36	e27	e21	e12	e12	9.5	9.3	62	172	119	75	46
16	36	25	e20	e11	e11	9.3	9.7	67	207	124	75	44
17	35	25	e20	40	e11	e9.0	9.9	73	214	121	72	44
18	34	27	e20	54	e11	e9.0	10	74	207	127	74	46
19	32	35	19	70	e11	e9.0	11	76	184	144	70	49
20	31	47	19	48	e11	e9.0	14	88	177	175	88	46
21	33	46	19	38	11	e9.0	16	89	191	154	84	45
22	33	45	e18	32	11	e9.0	18	85	216	147	76	43
23	30	40	e18	28	e10	e9.0	20	81	240	133	68	50
24	29	36	e18	25	e10	e8.5	20	86	253	120	63	67
25	38	35	17	23	e10	e8.5	21	87	250	113	59	57
26	34	e35	17	21	e10	e8.5	23	86	246	113	55	53
27	30	e35	16	20	e10	e8.5	26	88	242	114	53	49
28	e29	e35	15	e19	e10	e8.5	29	106	240	107	100	47
29	e28	35	30	e18	---	8.3	30	127	234	100	140	45
30	e27	32	36	e17	---	e8.0	32	144	206	95	104	42
31	26	---	29	e17	---	e7.5	---	138	---	100	88	---
TOTAL	1018	912	723	753	347	280.9	409.5	1984	5602	4141	2505	1629
MEAN	32.8	30.4	23.3	24.3	12.4	9.06	13.6	64.0	187	134	80.8	54.3
MAX	39	47	36	70	17	10	32	144	253	175	140	75
MIN	26	21	15	11	10	7.5	7.0	21	132	95	53	42
AC-FT	2020	1810	1430	1490	688	557	812	3940	11110	8210	4970	3230

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2001, BY WATER YEAR (WY)#

	MEAN	74.8	52.7	25.4	20.5	14.0	11.9	18.9	101	204	156	88.8	79.5
MAX	264	285	82.9	58.9	32.4	28.0	50.3	219	412	326	226	309	
(WY)	1958	1958	1958	1958	1958	1958	1958	1961	1958	1961	1961	1961	
MIN	20.7	11.9	10.0	8.00	6.43	4.50	9.00	42.6	73.7	68.1	38.0	21.6	
(WY)	1964	1964	1964	1964	1999	1999	1960	1964	1963	1960	1963	1963	

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1958 - 2001#

ANNUAL TOTAL	14155.0	20304.4	
ANNUAL MEAN	38.7	55.6	71.8
HIGHEST ANNUAL MEAN			a174 1958
LOWEST ANNUAL MEAN			29.9 1963
HIGHEST DAILY MEAN	149 Jun 7	253 Jun 24	ab810 Sep 22 1961
LOWEST DAILY MEAN	8.0 Mar 7	7.0 Apr 1	c4.0 Mar 19 1999
ANNUAL SEVEN-DAY MINIMUM	8.4 Mar 6	7.4 Mar 31	4.0 Mar 19 1999
MAXIMUM PEAK FLOW		288 Jun 23	ab841 Sep 21 1961
MAXIMUM PEAK STAGE		11.19 Jun 23	b2.10 Sep 21 1961
INSTANTANEOUS LOW FLOW		d	f3.1 Mar 1 1960
ANNUAL RUNOFF (AC-FT)	28080	40270	51990
10 PERCENT EXCEEDS	89	148	195
50 PERCENT EXCEEDS	31	32	34
90 PERCENT EXCEEDS	9.5	9.4	9.5

- # See Period of Record, partial years used in monthly statistics
a Includes natural flow or spill from area upstream from Cooper Lake dam
b Caused by release of water behind log jam upstream. Site and datum then in use
c From Mar. 19 to Apr. 14, 1999
d Not determined. See lowest daily mean
e Estimated
f Caused by temporary storage behind ice jam upstream (observed)

15261000 COOPER CREEK AT MOUTH NEAR COOPER LANDING--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1998 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: August 1998 to current year.

INSTRUMENTATION.--Electronic water-temperature recorder set for 15 minute recording interval.

REMARKS.--Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the average for the stream by cross section on December 12. No variations were found within the cross section. No variation was found between mean stream temperature and sensor temperature. Heavy shore ice occurs near the gage.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 11.5°C, July 14, 1999; Minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 10.0°C, August 13; Minimum, 0.0°C on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	STREAM WIDTH (FT) (00004)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM- PLING METHOD, TYPE CODES (82398)	SAMPLER TYPE (CODE) (84164)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)
DEC									
12...	1346	31.0	5.00	9.92	21	10	8010	1.0	2.5
12...	1348	31.0	10.0	9.92	21	10	8010	1.0	2.5
12...	1350	31.0	15.0	9.92	21	10	8010	1.0	2.5
12...	1352	31.0	20.0	9.92	21	10	8010	1.0	2.5
12...	1354	31.0	25.0	9.92	21	10	8010	1.0	2.5

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	2.0	.0	1.0	1.0	.0	.0	.0	.0	.0	1.0	.0	.5
2	3.0	.5	1.5	1.0	.0	.0	.0	.0	.0	.0	.0	.0
3	4.0	2.0	3.0	.5	.0	.0	.0	.0	.0	.0	.0	.0
4	4.0	3.0	3.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
5	5.0	3.0	4.0	1.5	.0	.5	.0	.0	.0	.0	.0	.0
6	5.5	4.0	4.5	1.5	.0	1.0	.5	.0	.0	.0	.0	.0
7	4.5	3.5	4.0	1.0	.0	.5	1.0	.0	1.0	.0	.0	.0
8	4.0	2.0	3.0	1.5	.0	.5	.0	.0	.0	.0	.0	.0
9	3.5	.5	2.0	2.0	1.5	2.0	.0	.0	.0	.0	.0	.0
10	3.0	.0	1.5	2.5	2.0	2.5	.0	.0	.0	.0	.0	.0
11	3.0	2.0	2.5	2.5	.0	1.0	1.0	.0	.5	.0	.0	.0
12	3.5	2.5	2.5	.0	.0	.0	1.0	.5	1.0	.0	.0	.0
13	3.5	2.0	3.0	1.0	.0	.5	.5	.0	.0	.0	.0	.0
14	4.0	3.0	3.5	1.0	.0	.5	.5	.0	.0	.0	.0	.0
15	3.5	2.0	3.0	.5	.0	.0	.5	.0	.0	.5	.0	.0
16	3.5	2.5	3.0	1.5	.5	1.0	.5	.0	.0	1.0	.5	.5
17	3.5	2.0	2.5	1.5	.5	1.0	.0	.0	.0	1.5	1.0	1.0
18	3.0	1.5	2.0	1.0	.5	1.0	.0	.0	.0	1.5	1.0	1.0
19	3.0	1.5	2.0	2.0	1.0	1.5	1.0	.0	1.0	1.5	1.0	1.0
20	2.5	.5	1.5	2.0	1.5	2.0	1.0	.5	.5	1.5	1.0	1.5
21	1.5	.0	.5	2.0	1.0	1.5	.5	.0	.5	1.5	1.0	1.0
22	2.0	1.0	1.5	1.5	1.5	1.5	.0	.0	.0	1.5	.5	1.0
23	1.5	.0	1.5	2.0	1.0	1.5	.0	.0	.0	1.5	1.0	1.0
24	2.0	.0	1.0	2.0	1.0	1.5	1.0	.0	.5	1.5	1.0	1.0
25	2.5	1.5	2.0	1.5	.0	.5	1.5	.5	1.0	1.0	.5	1.0
26	1.5	.5	1.0	.0	.0	.0	1.0	.5	1.0	1.0	.5	1.0
27	.5	.0	.5	.0	.0	.0	1.0	.5	1.0	1.0	.0	.5
28	.0	.0	.0	.0	.0	.0	1.5	1.0	1.0	.0	.0	.0
29	.0	.0	.0	1.0	.0	.5	1.5	.0	1.0	.0	.0	.0
30	.5	.0	.0	1.0	.0	.5	1.5	.5	1.0	.0	.0	.0
31	1.5	.5	1.0	---	---	---	1.5	1.0	1.0	.5	.0	.0
MONTH	5.5	.0	2.0	2.5	.0	.8	1.5	.0	.4	1.5	.0	.4

15261000 COOPER CREEK AT MOUTH NEAR COOPER LANDING--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	.5	.0	.0	.0	.0	.0	.0	.0	.0	3.5	.5	2.0
2	.0	.0	.0	.0	.0	.0	1.0	.0	.5	4.0	.5	2.0
3	.0	.0	.0	.0	.0	.0	2.0	.0	1.0	3.0	1.0	1.5
4	.0	.0	.0	.0	.0	.0	1.5	.0	1.0	4.0	.5	1.5
5	.0	.0	.0	.5	.0	.0	1.0	.0	.0	3.5	.0	1.5
6	.0	.0	.0	1.0	.0	.5	1.0	.0	.5	4.0	1.0	2.5
7	.0	.0	.0	1.0	.0	.5	2.0	.0	.5	5.0	1.0	3.0
8	.0	.0	.0	1.0	.0	.5	2.0	.5	1.0	5.5	1.5	3.0
9	.0	.0	.0	1.5	.5	1.0	2.0	.0	1.0	5.0	1.0	2.5
10	.0	.0	.0	1.5	.5	1.0	2.0	1.0	1.5	6.0	1.0	3.0
11	.0	.0	.0	1.5	.5	1.0	2.0	.5	1.0	5.0	1.0	2.5
12	.0	.0	.0	1.5	.5	1.0	2.5	.5	1.5	5.0	1.0	2.5
13	.0	.0	.0	1.0	.0	.5	3.0	.5	1.5	5.5	1.0	2.5
14	.0	.0	.0	2.0	.5	1.0	2.5	.0	1.0	5.5	1.0	2.5
15	.0	.0	.0	2.0	.5	1.0	3.0	.5	1.5	4.5	1.5	3.0
16	.0	.0	.0	2.0	.5	1.0	3.5	.5	1.5	4.5	1.5	2.5
17	.0	.0	.0	.5	.0	.0	3.5	.5	1.5	5.0	1.0	2.5
18	.0	.0	.0	.0	.0	.0	4.0	1.0	2.0	4.0	1.5	2.5
19	.0	.0	.0	.0	.0	.0	4.0	.5	1.5	5.5	1.5	3.0
20	.5	.0	.0	.0	.0	.0	3.5	.5	2.0	4.5	2.0	3.0
21	1.0	.5	.5	.0	.0	.0	4.0	1.5	2.0	4.0	2.0	2.5
22	.5	.0	.5	.5	.0	.0	4.0	1.0	2.0	4.5	1.5	2.5
23	.0	.0	.0	.5	.0	.0	3.0	.5	1.5	5.0	1.5	3.0
24	.0	.0	.0	.0	.0	.0	4.5	.5	2.0	5.0	1.5	3.0
25	.0	.0	.0	.0	.0	.0	4.0	1.0	2.5	5.0	1.5	3.0
26	.0	.0	.0	.0	.0	.0	4.0	1.0	2.5	5.0	2.0	3.0
27	.0	.0	.0	.0	.0	.0	4.0	1.0	2.5	5.5	1.5	3.0
28	.0	.0	.0	1.5	.0	.5	3.5	1.5	2.5	6.0	2.0	3.5
29	---	---	---	1.5	.5	1.0	5.0	1.0	2.5	5.0	2.0	3.5
30	---	---	---	.5	.0	.0	4.5	.5	2.0	4.0	2.5	3.0
31	---	---	---	1.0	.0	.0	---	---	---	5.5	2.0	3.5
MONTH	1.0	.0	.0	2.0	.0	.3	5.0	.0	1.5	6.0	.0	2.7

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	5.5	2.5	3.5	7.0	3.0	5.0	9.0	5.0	6.5	7.0	4.5	6.0
2	5.5	2.0	3.5	7.0	3.5	5.0	9.0	5.0	6.5	7.0	5.5	6.0
3	5.0	2.5	3.5	6.0	3.5	4.5	6.5	5.5	6.0	8.0	5.5	6.5
4	4.5	2.5	3.5	5.5	4.0	4.5	8.0	5.0	6.5	6.5	5.5	6.0
5	5.0	2.5	3.5	6.0	4.0	4.5	9.0	5.0	6.5	6.0	4.0	5.0
6	4.5	3.0	3.5	5.5	4.0	4.5	9.0	5.0	6.5	6.5	3.0	4.5
7	5.5	2.0	3.5	5.5	4.0	4.5	9.0	5.0	6.5	6.0	4.5	5.0
8	6.0	2.0	3.5	6.0	4.0	5.0	8.0	6.0	7.0	6.0	3.5	4.5
9	6.5	2.5	4.0	7.5	4.0	5.0	8.0	5.5	6.5	6.0	3.0	4.5
10	6.0	2.5	4.0	6.5	3.5	5.0	7.5	5.5	6.0	6.0	3.0	4.5
11	4.5	3.0	3.5	5.5	4.5	5.0	9.5	5.5	7.0	6.0	3.0	4.5
12	4.5	3.0	3.5	5.5	4.0	4.5	9.5	6.0	7.5	6.0	4.5	5.5
13	4.5	3.0	3.5	6.0	4.0	5.0	10.0	5.5	7.5	6.0	4.5	5.5
14	6.0	2.5	4.0	7.0	4.5	5.5	8.0	6.5	7.0	7.0	4.5	5.5
15	6.5	3.0	4.0	6.0	4.5	5.5	9.5	6.0	7.5	6.5	4.5	5.5
16	6.0	2.5	4.0	7.0	4.0	5.5	8.5	6.0	7.0	7.0	4.5	5.5
17	6.0	2.5	4.0	7.5	4.5	6.0	8.5	6.0	7.0	7.0	5.5	6.5
18	4.5	3.0	3.5	8.0	4.0	6.0	8.0	5.5	6.5	7.0	6.0	6.5
19	6.0	2.5	4.0	6.5	5.5	6.0	7.5	5.5	6.5	7.0	5.5	6.0
20	5.5	3.0	4.0	7.0	5.0	5.5	7.5	5.5	6.5	6.5	5.0	5.5
21	5.5	3.5	4.5	6.0	4.0	5.0	8.5	5.5	7.0	6.0	4.5	5.5
22	6.5	3.0	4.5	6.0	5.0	5.5	8.5	5.0	6.5	6.5	4.0	5.0
23	6.5	3.0	4.5	6.0	4.5	5.5	8.5	5.0	6.5	5.5	4.5	5.0
24	6.0	3.0	4.5	6.0	5.0	5.5	7.0	6.0	6.5	5.5	4.5	5.0
25	6.5	3.0	4.5	7.0	5.0	6.0	8.0	5.5	6.5	6.0	3.5	4.5
26	6.5	3.5	4.5	8.0	5.0	6.5	8.5	5.5	6.5	6.0	3.5	4.5
27	6.5	3.5	4.5	8.0	4.5	6.0	7.5	4.5	6.0	5.5	2.5	4.0
28	6.5	3.5	5.0	8.0	4.5	6.0	6.5	6.0	6.0	5.5	3.5	4.5
29	6.5	3.5	4.5	8.0	4.5	6.0	6.5	5.0	6.0	4.5	3.5	4.0
30	6.5	3.0	4.5	7.0	5.5	6.0	7.0	5.0	6.0	5.0	2.5	3.5
31	---	---	---	7.5	5.0	6.0	6.5	4.5	5.5	---	---	---
MONTH	6.5	2.0	4.0	8.0	3.0	5.4	10.0	4.5	6.6	8.0	2.5	5.2

15266110 KENAI RIVER BELOW SKILAK LAKE OUTLET NEAR STERLING

LOCATION.--Lat 60°28'00", long 150°35'56", in SW¹/₄ NW¹/₄ sec. 1, T. 4 N., R. 8 W. (Kenai B-2 quad), Kenai Peninsula Borough, Hydrologic Unit 19020302, on right bank, 3.5 mi downstream from Skilak Lake, 7 mi southeast of Sterling.

DRAINAGE AREA.--1,206 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1997 to current year.

REVISED RECORDS.-- WRD-AK-00-1: Drainage area.

GAGE.--Water stage recorder. Elevation of gage is 240 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Rain gage recorder at station. GOES satellite telemetry and phone modem at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e5000	2850	2570	1890	3450	1600	1100	1290	4260	16100	15000	17700
2	e5000	2770	2510	1900	3330	1590	1170	1370	4600	16200	14600	18200
3	e4900	2690	2480	1910	3210	1540	1210	1410	5010	16200	14300	18300
4	e4800	2620	2440	1910	3060	1580	1070	1450	5380	16200	14200	18000
5	e4700	2550	2480	1910	3000	1540	1080	1500	5770	16200	14000	17400
6	e4600	2480	2430	1900	2960	1510	1070	1530	6140	16200	13700	16700
7	e4500	2400	2420	2150	2790	1490	1070	1550	6480	15900	13400	16000
8	e4400	2320	2360	2220	2680	1530	1060	1580	6750	15900	13300	15200
9	e4400	2350	2320	2270	2620	1450	1070	1610	6980	15700	13100	14300
10	e4300	2360	2310	2280	2530	1450	1270	1640	7190	15400	12900	13500
11	e4200	2210	2290	2280	2440	1480	1170	1670	7420	15200	12500	12700
12	e4130	2170	2210	2330	2420	1390	1070	1690	7650	14900	12200	11900
13	4130	2290	2170	2410	2340	1380	1080	1740	7840	14600	12000	11400
14	4080	2210	2160	2570	2250	1410	1060	1780	7990	14300	12000	10900
15	3960	2190	2070	2710	2050	1340	1060	1840	8170	14000	12100	10600
16	3920	2180	2030	2830	2280	1330	1070	1900	8430	13900	12300	10500
17	3870	2260	2020	2960	2140	1310	1070	1970	8800	13800	12600	10500
18	3780	2210	2030	3160	1970	1280	1080	2060	9260	13600	12800	10500
19	3720	2260	2110	3490	1930	1250	1090	2160	9700	13800	13000	10800
20	3650	2230	2000	3610	1860	1220	1130	2290	10100	14000	13100	11200
21	3590	2320	1960	3800	1810	1210	1160	2420	10500	14600	13500	11800
22	3520	2350	1890	3950	1760	1180	1110	2530	10900	15300	13800	12800
23	3490	2400	1860	4050	1710	1160	1130	2670	11400	15900	14200	14100
24	3500	2430	1830	4190	1660	1150	1150	2810	11900	16300	14300	15000
25	3410	2440	1800	4120	1610	1130	1190	2960	12500	16600	14400	15500
26	3270	2440	1790	4120	1650	1120	1190	3110	13200	16600	14200	15400
27	3200	2420	1780	3980	1680	1110	1210	3260	13800	16600	13800	14900
28	3120	2520	1730	3880	1620	1090	1270	3410	14500	16400	13700	14200
29	3030	2570	1810	3750	---	1070	1260	3560	15200	16200	14500	13300
30	2960	2590	1860	3670	---	1090	1290	3760	15800	15700	15500	12500
31	2920	---	1880	3570	---	1110	---	3990	---	15200	16700	---
TOTAL	122050	72080	65600	91770	64810	41090	34010	68510	273620	477500	421700	415800
MEAN	3939	2403	2116	2960	2315	1325	1134	2210	9121	15400	13600	13860
MAX	5000	2850	2570	4190	3450	1600	1290	3990	15800	16600	16700	18300
MIN	2920	2170	1730	1890	1610	1070	1060	1290	4260	13600	12000	10500
AC-FT	242100	143000	130100	182000	128600	81500	67460	135900	542700	947100	836400	824700
CFSM	3.26	1.99	1.75	2.45	1.92	1.10	.94	1.83	7.56	12.8	11.3	11.5
IN.	3.76	2.22	2.02	2.83	2.00	1.27	1.05	2.11	8.44	14.73	13.01	12.83

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2001, BY WATER YEAR (WY)#

	MEAN	5768	3210	1835	1761	1424	1052	1103	2394	8048	13300	11930	10220
MAX	7498	4441	2116	2960	2315	1325	1241	2637	9795	15400	13600	13860	
(WY)	1998	2000	2001	2001	2001	2001	1998	1998	1998	2001	2001	2001	
MIN	3939	2403	1528	1164	891	870	995	2210	6156	11960	10310	5659	
(WY)	2001	2001	1999	1999	1998	1998	1999	2001	1997	1999	1998	2000	

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1997 - 2000#
ANNUAL TOTAL	1628721	2148540	
ANNUAL MEAN	4450	5887	5200
HIGHEST ANNUAL MEAN			5887
LOWEST ANNUAL MEAN			4742
HIGHEST DAILY MEAN	14500	Jul 20	18300
LOWEST DAILY MEAN	915	Apr 14	776
ANNUAL SEVEN-DAY MINIMUM	929	Apr 10	792
MAXIMUM PEAK FLOW		18500	18500
MAXIMUM PEAK STAGE		13.21	13.21
INSTANTANEOUS LOW FLOW		1010	b765
ANNUAL RUNOFF (AC-FT)	3231000	4262000	3767000
ANNUAL RUNOFF (CFSM)		4.88	4.31
ANNUAL RUNOFF (INCHES)	50.24	66.27	58.59
10 PERCENT EXCEEDS	11900	15000	13100
50 PERCENT EXCEEDS	2440	2830	3410
90 PERCENT EXCEEDS	1060	1210	1040

See Period of Record, partial year used in monthly statistics

a Apr 8, 14, and 15

b Mar 12 and 13, 1998

e Estimated

15266110 KENAI RIVER BELOW SKILAK LAKE OUTLET NEAR STERLING--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1998 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1998 to current year.

INSTRUMENTATION.--Electronic water-temperature recorder set at 15-minute recording interval.

REMARKS.--No record October 1-12 due to low power to the data recorder, and March 18 to May 1 when the sensor was out of water. Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the river average by cross section on October 6 and July 31. No variation was found within the cross-sections. No variation was found between mean stream temperature and temperature at the sensor.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum observed, 15.0°C, July 7, but may have been higher during period of missing record in June and July 1999; minimum, 0.0°C on many days in winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 15.0°C, August 7 and 14; minimum, 0.0°C on many days in winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAMPLE LOCA- TION, CROSS SECTION (FT FM L BANK) (00009)	SPECIFIC CONDUCT- TANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAN- DARD UNITS) (00400)	TEMPERA- TURE WATER (DEG C) (00010)	BAROMET- RIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PERCENT SATURA- TION) (00300)	OXYGEN, DIS- SOLVED (PERCENT SATURA- TION) (00301)
OCT								
12...	1802	30.0	62	8.1	7.0	751	12.6	105
12...	1804	100	62	8.1	7.0	751	12.5	104
12...	1806	170	62	8.0	7.0	751	12.5	104
12...	1808	240	62	8.1	7.0	751	12.5	104
12...	1810	310	62	8.1	7.0	751	12.5	104
AUG								
07...	1540	40.0	68	8.1	15.0	773	10.9	107
07...	1541	120	68	8.1	15.0	773	10.7	105
07...	1542	200	68	8.1	15.0	773	10.6	104
07...	1543	280	68	8.1	15.0	773	10.6	104
07...	1544	360	68	8.1	15.0	773	10.5	103
SEP								
04...	1535	40.0	64	7.8	11.5	744	10.7	101
04...	1536	120	64	7.8	11.5	744	10.8	101
04...	1537	200	64	7.8	11.5	744	10.7	101
04...	1538	280	64	7.8	11.5	744	10.6	100
04...	1539	360	64	7.8	11.5	744	10.6	100

DATE	TIME	MEDIUM CODE	SAMPLE TYPE	STREAM WIDTH (FT) (00004)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM- PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	PURPOSE SITE VISIT (CODE) (50280)	QUALITY ASSUR- ANCE DATA INDICA- TOR CODE (99111)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER FIELD (STAND- ARD UNITS) (00400)	TEMPERA- TURE AIR (DEG C) (00020)
OCT													
12...	1740	9	9	340	8.29	4480	10	3053	1001	--	62	8.1	--
NOV													
07...	1420	9	9	325	7.36	2370	10	3053	1001	--	64	7.9	--
JAN													
03...	1120	9	9	395	7.06	1920	10	3045	1001	--	63	7.7	--
FEB													
06...	1050	9	9	390	7.69	3030	10	3045	1001	--	61	8.0	-1.5
MAR													
06...	1100	9	7	375	6.78	1490	10	3045	1001	30	62	7.5	4.0
MAY													
09...	1620	9	9	385	6.81	1610	10	3045	1001	--	65	7.6	.00
09...	1621	D	9	--	--	--	10	8010	1099	--	--	--	--
JUN													
13...	1520	9	9	357	9.93	8030	10	3053	1001	10	70	8.0	14.5
22...	1230	9	9	375	10.99	10900	10	3053	1001	--	62	7.9	18.0
27...	1310	9	9	390	11.91	13900	10	3053	1001	--	68	7.8	22.5
JUL													
12...	1250	9	9	380	12.24	14700	10	3053	1001	--	68	7.3	15.5
24...	1630	9	9	380	12.64	16400	10	3053	1002	--	64	7.8	15.5
AUG													
07...	1530	9	9	390	11.78	13600	10	3053	1001	--	68	8.1	--
SEP													
04...	1520	9	9	380	13.09	17500	10	3053	1001	--	64	7.8	--

15266110 KENAI RIVER BELOW SKILAK LAKE OUTLET NEAR STERLING--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TEMP- ERATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MMOF HG) (00025)	OXYGEN DIS- OLVED (MG/L) (00300)	OXYGEN, DIS- OLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM DIS- SOLVED (MG/L AS NA) (00930)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICARBO NATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT FIELD MG/S AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
OCT													
12...	7.0	751	12.5	104	27	9.71	.683	1.0	23	.67	26	21	6.2
NOV													
07...	4.5	755	12.6	98	27	9.65	.671	1.0	23	.90	27	22	6.3
JAN													
03...	2.5	755	13.7	101	28	9.96	.733	1.1	23	.80	28	23	6.1
FEB													
06...	1.5	759	13.0	93	29	10.4	.723	1.1	24	.81	28	23	6.2
MAR													
06...	1.5	748	13.5	98	27	9.61	.696	1.0	23	1.10	26	22	6.6
MAY													
09...	5.0	758	13.0	102	27	9.83	.694	1.1	24	.76	27	22	6.5
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
13...	10.5	761	11.6	104	29	10.4	.759	1.1	23	.70	27	23	1.2
22...	13.0	762	10.3	98	29	10.4	.745	1.1	24	.61	27	22	6.2
27...	13.0	763	11.1	105	30	10.8	.778	1.2	24	.72	26	23	6.4
JUL													
12...	11.0	760	11.0	100	29	10.4	.773	1.2	24	.73	28	23	6.7
24...	12.0	765	10.5	97	30	10.7	.776	1.2	27	.69	29	24	6.9
AUG													
07...	15.0	773	10.6	104	29	10.4	.752	1.1	24	.70	28	23	6.8
SEP													
04...	11.5	744	10.7	101	29	10.3	.742	1.1	22	.69	25	21	6.7

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLOU- RIDE DIS- SOLVED (MG/L AS F) (00950)	SIL- ICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOL- IDS, RISI- DUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOL- IDS, SUM OF CON- STITU- ENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMO- NIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMO- NIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMO- NIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
OCT													
12...	.8	<.2	2.6	41	35	<.001	.159	.017	E.05	<.10	.009	<.006	<.007
NOV													
07...	.8	<.2	2.6	37	36	<.001	.150	.002	<.08	<.10	.007	<.006	<.007
JAN													
03...	.8	<.2	2.9	43	37	.001	.189	<.002	<.08	<.10	.006	<.006	<.007
FEB													
06...	.9	<.2	2.8	36	37	.002	.172	.003	E.04	<.10	.005	<.006	<.007
MAR													
06...	.8	<.2	2.6	39	36	<.001	.165	.003	E.07	E.06	.005	<.006	<.007
MAY													
09...	.7	<.2	2.7	45	36	<.001	.155	<.002	E.06	<.10	.005	<.006	<.007
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
13...	.8	<.2	3.0	39	32	<.001	.154	.002	<.08	<.10	.004	<.006	<.007
22...	.8	<.2	3.0	33	37	.001	.158	.002	E.06	<.10	.005	<.006	<.007
27...	.8	<.2	3.1	42	37	.001	.159	.003	E.06	<.10	.005	<.006	<.007
JUL													
12...	1.0	<.2	3.2	42	38	.001	.164	<.002	E.06	<.10	.005	E.004	<.007
24...	.8	<.2	3.1	39	39	.001	.171	<.002	<.08	<.10	<.004	<.006	<.007
AUG													
07...	.8	<.2	3.0	59	38	.001	.142	.006	E.04	<.10	E.003	<.006	<.007
SEP													
04...	.7	<.2	3.0	42	36	<.001	.153	.025	<.08	<.10	E.003	<.006	<.007

15266110 KENAI RIVER BELOW SKILAK LAKE OUTLET NEAR STERLING--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CAR- BON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CAR- BON, INOR- GANIC, PAR- TIC. TOTAL (MG/L AS C) (00688)	CAR- BON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	CAR- BON, INORG + ORGANIC PAR- TIC. TOTAL (MG/L AS C) (00694)	NITRO- GEN, PARTIC- ULATE WAT FLT SUSP (MG/L AS N) (49570)	CHLOR-A PERIPH- YTON CHROMO- GRAPHIC FLUO- ROM (MG/M2) (70957)	PERIPH- YTON BIO- MASS ASH WEIGHT G/SQ M (00572)	PERIPH- YTON BIO- MASS DRY WEIGHT G/SQ M (00573)	PHEO- PHYTTIN A, PERI- PHYTON (MG/M2) (62359)	SEDI- MENT, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)
OCT													
12...	<10	<3.2	.59	<.1	<.1	<.1	<.022	--	--	--	--	3	36
NOV													
07...	<10	<3.2	.44	<.1	<.1	<.1	<.022	--	--	--	--	7	45
JAN													
03...	<10	<3.2	.56	<.1	<.1	<.1	.024	--	--	--	--	5	26
FEB													
06...	<10	<3.2	.49	<.1	.1	.1	<.022	--	--	--	--	7	57
MAR													
06...	<10	<3.2	.47	<.1	<.1	<.1	<.022	--	--	--	--	4	16
MAY													
09...	M	E2.4	.47	--	--	<.1	<.022	--	--	--	--	2	8.7
09...	--	--	--	--	--	--	--	1.8	39.6	41.5	.6	--	--
JUN													
13...	<10	<3.0	.58	--	--	.2	<.022	--	--	--	--	1	22
22...	<10	<3.0	.58	--	--	.2	<.022	--	--	--	--	2	59
27...	<10	<3.0	.51	--	--	.2	.044	--	--	--	--	3	113
JUL													
12...	<10	<3.0	.64	--	--	.3	.031	--	--	--	--	4	159
24...	<10	<3.0	.55	--	--	.2	.033	--	--	--	--	5	221
AUG													
07...	<10	<3.0	.51	--	--	E.2	E.017	--	--	--	--	2	73
SEP													
04...	<10	<3.0	.44	--	--	.2	.026	--	--	--	--	3	142

DATE	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT	
12...	--
NOV	
07...	--
JAN	
03...	83
FEB	
06...	96
MAR	
06...	--
MAY	
09...	--
09...	--
JUN	
13...	--
22...	--
27...	--
JUL	
12...	--
24...	82
AUG	
07...	--
SEP	
04...	--

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

[illegible]

15266110 KENAI RIVER BELOW SKILAK LAKE OUTLET NEAR STERLING--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	8.0	4.0	6.0	12.0	9.5	11.0	12.5	11.5	11.5	11.5	11.0	11.0
2	8.5	4.0	6.5	12.0	9.5	11.0	13.0	11.0	12.0	11.0	11.0	11.0
3	10.5	7.0	9.0	10.5	9.5	10.0	11.5	10.0	10.5	11.5	11.0	11.0
4	9.0	7.0	8.0	10.5	9.5	10.0	11.5	10.0	11.0	12.0	11.0	11.5
5	8.5	7.5	8.0	10.5	10.0	10.0	12.5	10.5	11.5	11.0	8.5	10.0
6	7.5	5.5	6.5	12.0	10.5	11.0	14.0	12.0	13.0	9.5	8.0	8.5
7	7.5	5.0	6.0	13.0	12.0	12.5	15.0	12.5	14.0	10.0	9.5	9.5
8	9.0	6.0	7.5	14.0	13.0	13.5	14.5	13.0	13.5	10.0	9.0	9.5
9	10.0	6.5	8.0	14.0	13.0	13.5	14.0	13.0	13.5	10.0	9.0	9.5
10	10.0	6.5	8.0	14.0	12.5	13.5	14.5	13.0	14.0	10.5	10.0	10.0
11	9.5	6.0	7.5	13.0	11.5	13.0	14.5	13.0	13.5	11.0	10.0	10.5
12	10.5	9.0	10.0	11.5	10.5	11.0	14.5	13.0	13.5	10.5	10.0	10.0
13	11.5	9.0	10.0	11.5	11.0	11.0	14.5	13.0	13.5	10.0	9.5	9.5
14	11.5	8.5	10.0	12.0	10.5	11.5	15.0	12.5	14.0	9.5	9.0	9.5
15	11.0	7.0	9.0	11.5	11.0	11.5	14.5	12.5	13.5	10.0	9.0	9.5
16	12.0	8.0	10.0	13.0	11.0	11.5	13.0	12.0	12.5	10.0	9.5	9.5
17	12.5	8.0	10.5	12.5	11.0	12.0	13.5	12.5	13.0	10.0	9.5	9.5
18	12.0	10.5	11.5	14.0	11.0	12.0	13.0	12.5	12.5	9.5	9.0	9.5
19	12.0	10.5	11.5	14.0	12.0	13.5	13.0	12.0	12.5	9.5	9.0	9.5
20	13.0	9.5	11.0	12.0	11.5	12.0	12.0	11.0	11.5	10.5	9.5	9.5
21	14.0	11.0	12.5	11.5	10.5	11.0	11.5	10.5	11.0	9.5	9.0	9.5
22	13.5	10.0	12.0	13.0	10.5	11.5	12.5	11.0	11.5	9.0	9.0	9.0
23	14.0	11.0	12.5	12.5	12.0	12.0	12.5	11.5	11.5	9.0	8.5	9.0
24	13.5	9.0	11.0	12.0	11.5	12.0	12.5	12.0	12.5	9.0	8.5	8.5
25	14.5	9.0	12.0	12.0	11.5	12.0	12.5	12.0	12.0	9.0	8.5	8.5
26	14.0	10.5	12.5	12.5	11.5	12.0	13.0	12.5	12.5	9.0	8.5	8.5
27	14.0	11.0	12.5	13.5	12.0	12.5	13.0	11.5	12.0	9.0	8.5	8.5
28	12.5	8.5	10.5	12.5	11.5	12.0	12.0	11.5	11.5	8.5	8.5	8.5
29	14.0	10.0	12.0	13.0	11.5	12.0	11.5	11.5	11.5	9.0	8.0	8.5
30	11.5	9.5	10.0	13.0	12.0	12.5	12.0	11.0	11.5	8.5	8.0	8.5
31	---	---	---	12.0	11.5	12.0	11.5	11.0	11.5	---	---	---
MONTH	14.5	4.0	9.7	14.0	9.5	11.8	15.0	10.0	12.4	12.0	8.0	9.5

15266150 KENAI RIVER BELOW MOUTH OF KILLEY RIVER NEAR STERLING

LOCATION.--Lat 60°29'28", long 150°37'50", in NW¹/₄ SW¹/₄ SE¹/₄ sec. 26, T. 5 N., R. 8 W. (Kenai B-2 quad), Kenai Peninsula Borough, Hydrologic Unit 19020302, on right bank, 1.5 mi downstream from Killey River, 4.5 mi southeast of Sterling.

DRAINAGE AREA.--1,496 mi².

PERIOD OF RECORD.--June 1997 to current year.

GAGE.--Water stage recorder. Elevation of gage is 230 ft above sea level, from topographic map.

REMARKS.--Records good except for February 15 which is fair. GOES satellite telemetry and phone modem at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5520	3060	2750	2130	3530	1650	1180	1590	5190	18900	17900	19000
2	5390	2970	2620	2100	3380	1630	1220	1630	5660	18700	17500	18900
3	5280	2890	2590	2050	3210	1590	1290	1640	6080	18700	17100	18900
4	5190	2780	2580	2010	3070	1610	1180	1660	6610	18700	17000	18700
5	5080	2720	2660	2000	3000	1580	1180	1700	7000	18800	16700	18200
6	5030	2670	2660	1970	2980	1560	1170	1720	7340	18900	16100	17400
7	4980	2580	2650	2190	2810	1540	1180	1730	7680	18700	16000	16500
8	4930	2480	2580	2300	2690	1560	1180	1760	7940	18700	15900	15700
9	4830	2520	2530	2400	2620	1510	1180	1800	8200	18600	15700	14600
10	4690	2620	2470	2390	2510	1500	1330	1800	8490	18300	15500	13700
11	4600	2490	2470	2350	2430	1540	1320	1830	8750	18000	15000	12800
12	4490	2400	2380	2410	2410	1480	1300	1870	8990	17800	14600	12000
13	4460	2510	2310	2470	2340	1470	1310	1920	9220	17400	14400	11700
14	4570	2460	2300	2650	2250	1480	1300	1980	9380	16900	14400	11200
15	4510	2370	2200	2890	e2250	1420	1290	2070	9640	16500	14400	10900
16	4380	2420	2160	3190	2240	1410	1300	2170	10100	16600	14700	10700
17	4290	2490	2140	3280	2150	1390	1310	2270	10700	16400	14900	10600
18	4150	2430	2160	3510	1980	1370	1320	2380	11300	16400	15100	10800
19	4060	2500	2240	3980	1950	1330	1330	2470	11700	16600	15300	11100
20	3970	2500	2150	4050	1890	1300	1360	2620	12000	17500	15500	11500
21	3850	2630	2130	4140	1850	1280	1420	2790	12400	18500	16000	12000
22	3810	2670	2030	4250	1800	1260	1400	2930	13000	18900	16000	12800
23	3770	2700	1970	4310	1740	1250	1430	3070	13600	19100	16100	14200
24	3740	2700	1950	4410	1680	1260	1430	3220	14300	19300	16100	15800
25	3690	2660	1930	4320	1640	1230	1450	3380	15100	19400	16000	16000
26	3540	2590	1930	4300	1660	1210	1460	3550	15800	19400	15700	15700
27	3430	2560	1920	4130	1710	1200	1480	3730	16600	19300	15300	15300
28	3280	2680	1880	3970	1670	1190	1540	3890	17500	19100	15100	14400
29	3190	2860	1970	3810	---	1170	1530	4160	18300	18900	17200	13500
30	3180	2850	2090	3740	---	1190	1570	4470	18800	18400	18000	12700
31	3130	---	2170	3650	---	1200	---	4730	---	18100	18500	---
TOTAL	133010	78760	70570	97350	65440	43360	39940	78530	327370	565500	493700	427300
MEAN	4291	2625	2276	3140	2337	1399	1331	2533	10910	18240	15930	14240
MAX	5520	3060	2750	4410	3530	1650	1570	4730	18800	19400	18500	19000
MIN	3130	2370	1880	1970	1640	1170	1170	1590	5190	16400	14400	10600
AC-FT	263800	156200	140000	193100	129800	86000	79220	155800	649300	1122000	979300	847500
CFSM	2.87	1.75	1.52	2.10	1.56	.93	.89	1.69	7.29	12.2	10.6	9.52
IN.	3.31	1.96	1.75	2.42	1.63	1.08	.99	1.95	8.14	14.06	12.28	10.63

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2001, BY WATER YEAR (WY)#

	MEAN	6076	3393	1952	1850	1469	1130	1276	2660	9240	14710	12910	10710
MAX	7859	4451	2276	3140	2337	1399	1490	2962	11080	18240	15930	14240	14240
(WY)	1998	2000	2001	2001	2001	2001	2001	1998	1998	2001	2001	2001	2001
MIN	4291	2625	1646	1126	989	926	1010	2456	7701	12580	11020	6196	6196
(WY)	2001	2001	1999	1999	1998	1999	1999	1999	1999	1997	1999	1998	2000

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1997 - 2001#
ANNUAL TOTAL	1743040	2420830	
ANNUAL MEAN	4762	6632	5635
HIGHEST ANNUAL MEAN			6632
LOWEST ANNUAL MEAN			5010
HIGHEST DAILY MEAN	15400	Jul 17	a19400
LOWEST DAILY MEAN	1120	Mar 27	b1170
ANNUAL SEVEN-DAY MINIMUM	1140	Mar 22	1190
MAXIMUM PEAK FLOW			d19600
MAXIMUM PEAK STAGE			12.25
INSTANTANEOUS LOW FLOW			1150
ANNUAL RUNOFF (AC-FT)	3457000	4802000	4083000
ANNUAL RUNOFF (CFSM)	3.18	4.43	3.77
ANNUAL RUNOFF (INCHES)	43.34	60.20	51.18
10 PERCENT EXCEEDS	12500	17400	14200
50 PERCENT EXCEEDS	2660	3060	3730
90 PERCENT EXCEEDS	1180	1410	1100

See Period of Record, partial year used in monthly statistics

a Jul. 25 and 26

b Mar. 29 and Apr. 6

c Apr 19, 1997 and Apr. 6-7, 1999

d Jul. 24 and 25

e Estimated

f Not determined, see lowest daily mean

15266300 KENAI RIVER AT SOLDOTNA

LOCATION.--Lat 60°28'39", long 151°04'46", in W¹/₂ SW¹/₄ sec. 32, T. 5 N., R. 10 W. (Kenai B-3 quad), Kenai Peninsula Borough, Hydrologic Unit 19020302, near center of span on downstream side of bridge on Sterling Highway, 1.0 mi southwest of Soldotna.

DRAINAGE AREA.--1,951 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1965 to current year.

REVISED RECORDS.--WRD AK-00-1 drainage area.

GAGE.--Water-stage recorder. Datum of gage is 35.34 ft above sea level. Prior to May 1, 1997, non-recording gage at same site and datum.

REMARKS.--Records good, except for estimated daily discharges, which are poor. GOES satellite telemetry and phone modem at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5640	3260	2910	2210	3780	1840	1340	2330	5850	18400	18100	19300
2	5550	3170	2880	2180	3580	1820	1350	2330	6370	18300	17800	19500
3	5490	3100	2660	2210	3460	1870	1670	2300	6770	18100	17500	19800
4	5470	2990	2700	2120	3300	1890	1530	2290	7320	18300	17300	19600
5	5550	2950	2890	2110	3190	1790	1430	2310	7700	18400	17000	19300
6	5570	2920	2740	2160	3240	1750	1450	2350	8050	18600	16700	18600
7	5480	2850	2780	2430	3030	1710	1480	2390	8420	18200	16200	17800
8	5160	2660	2710	2540	2960	1730	1540	2390	8660	17800	16000	17000
9	5050	2700	2660	2510	2840	1730	1560	2460	8900	17700	15900	16200
10	4950	3030	2620	2550	2810	1770	1810	2500	9120	17300	15800	15400
11	4830	2970	2590	e2500	2690	1960	2220	2550	9340	17200	15500	14500
12	4750	2760	2510	e2500	2670	1790	2170	2630	9590	17000	15300	13800
13	4700	2880	2440	2550	2580	1690	2140	2730	9810	16800	15000	13200
14	4960	2870	2390	2770	e2500	1760	2140	2800	9970	16400	15000	12500
15	4910	2660	2290	3020	e2400	1740	2170	2980	10200	16200	15000	12100
16	4800	2740	2270	3300	2450	1700	2170	2970	10500	16300	15100	12000
17	4590	2810	2300	3370	2500	1640	2170	3010	11100	16200	15300	12100
18	4390	2730	2330	3620	2250	1620	2140	3070	11600	15900	15500	12200
19	4290	2850	2400	4000	2300	1650	2140	3170	12000	16200	15900	12500
20	4210	2880	2370	4160	2220	1630	2210	3330	12300	16800	16200	13000
21	4120	3020	2270	4230	2120	1590	2400	3540	12600	17600	16700	13500
22	4140	3100	2290	4340	2030	1560	2450	3660	13000	18100	16600	14100
23	4000	3060	2140	4410	1970	1530	2500	3790	13600	18400	16700	15200
24	3930	3100	2150	4510	e1900	1580	2480	3940	14200	18700	16600	16700
25	4030	2880	2170	4460	e1900	1570	2460	4110	15000	18900	16600	17000
26	3840	2690	2110	4480	e1800	1510	2450	4290	15600	19200	16400	16800
27	3660	2640	1960	4300	e1800	1490	2490	4510	16300	19500	15900	16200
28	3500	2730	2090	4160	1840	1440	2550	4770	16900	19200	15700	15400
29	3380	2980	2190	4010	---	1350	2500	4930	17600	19000	17200	14600
30	3480	3020	2280	3920	---	1360	2450	5280	18200	18800	18300	13600
31	3430	---	2370	3940	---	1370	---	5570	---	18300	18800	---
TOTAL	141850	87000	75460	101570	72110	51430	61560	101280	336570	551800	507600	463500
MEAN	4576	2900	2434	3276	2575	1659	2052	3267	11220	17800	16370	15450
MAX	5640	3260	2910	4510	3780	1960	2550	5570	18200	19500	18800	19800
MIN	3380	2640	1960	2110	1800	1350	1340	2290	5850	15900	15000	12000
AC-FT	281400	172600	149700	201500	143000	102000	122100	200900	667600	1094000	1007000	919400
CFSM	2.35	1.49	1.25	1.68	1.32	.85	1.05	1.67	5.75	9.12	8.39	7.92
IN.	2.70	1.66	1.44	1.94	1.37	.98	1.17	1.93	6.42	10.52	9.68	8.84

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2001, BY WATER YEAR (WY)#

	MEAN	7156	3447	2223	1864	1634	1341	1563	3141	8496	13480	14440	11770
MAX	14370	7335	5469	4290	4575	2696	2836	5645	12570	18740	24890	21280	
(WY)	1970	1980	1977	1981	1981	1981	1980	1990	1980	1977	1977	1995	
MIN	2852	1631	1132	823	822	800	812	1950	4940	9696	8706	5873	
(WY)	1993	1974	1976	1976	1976	1976	1972	1973	1972	1973	1969	1969	

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1965 - 2001#
ANNUAL TOTAL	1839650	2551730	
ANNUAL MEAN	5026	6991	5926
HIGHEST ANNUAL MEAN			8810
LOWEST ANNUAL MEAN			4002
HIGHEST DAILY MEAN	15500	Jul 22	19800
LOWEST DAILY MEAN	a1300	Mar 1	1340
ANNUAL SEVEN-DAY MINIMUM	1300	Mar 1	1390
MAXIMUM PEAK FLOW			20000
MAXIMUM PEAK STAGE			10.84
MAXIMUM PEAK STAGE			14.50
INSTANTANEOUS LOW FLOW			1300
ANNUAL RUNOFF (AC-FT)	3649000	5061000	4293000
ANNUAL RUNOFF (CFSM)	2.58	3.58	3.04
ANNUAL RUNOFF (INCHES)	35.08	48.65	41.27
10 PERCENT EXCEEDS	13100	17200	14200
50 PERCENT EXCEEDS	2950	3330	3250
90 PERCENT EXCEEDS	1400	1800	1200

See Period of Record; partial years used in monthly statistics

a Mar. 1 to Mar. 29

b Apr. 1 to Apr. 4, 1996

c Backwater from ice

e Estimated

15266300 KENAI RIVER AT SOLDOTNA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1952-53, 1955-56, 1958, 1967-74, 1977, 1979-81, 1998- September 2001 (discontinued).

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: August 1979 to December 1979, August to November 1999, May to September 2001.

WATER TEMPERATURE: October 1998 to September 2001.

INSTRUMENTATION.--Electronic water-temperature recorder set at 15-minute recording interval.

REMARKS.--Sediment sampler for daily sediment samples is on upstream side of bridge. Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the river average by cross section on October 4, February 7, and September 5. No variation was found within the cross-section, No variation was found between mean stream temperature and sensor temperature.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean observed, 83 mg/L June 27, 29, 2001; minimum daily mean observed, 1 mg/L September 7, 9, and October 23, 1979.

SEDIMENT LOADS: Maximum daily observed, 3,940 tons (3,570 tonnes) June 29, 2001; minimum daily observed, 14 tons (13 tonnes) March 7, 2001.

WATER TEMPERATURE: Maximum 15.0°C, August 14, 2000, and August 7, 2001; minimum 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum observed, 83 mg/L June 27, 29, 2001; minimum observed 2 mg/L February 7, May 14-15 2001.

SEDIMENT LOADS: Maximum daily observed, 3,940 tons (3,570 tonnes) June 29, 2001; minimum daily observed, 14 tons (13 tonnes) March 7, 2001.

WATER TEMPERATURE: Maximum 15.0°C, August 7; minimum 0.0°C on many days in winter.

EXTREMES OUTSIDE PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum observed, 151 mg/L July 14, 1979; minimum observed 1 mg/L March 24, 1971.

SEDIMENT LOADS: Maximum daily observed, 9,290 tons (8,430 tonnes) September 9, 1977; minimum daily observed, 3.1 tons (2.8 tonnes) March 24, 1971.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (000009)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (000095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
OCT								
04...	1809	40.0	70	7.7	7.0	763	12.2	100
04...	1810	100	68	7.7	7.0	763	12.3	101
04...	1811	160	67	7.6	7.0	763	12.1	99.5
04...	1812	220	66	7.6	7.0	763	12.2	100
04...	1814	280	67	7.6	7.0	763	12.2	100
FEB								
07...	1135	118	69	8.2	1.0	768	13.6	94.9
07...	1137	173	66	8.2	1.0	768	13.4	93.5
07...	1139	228	66	8.1	1.0	768	13.3	92.8
07...	1141	283	66	8.1	1.0	768	13.3	92.8
SEP								
05...	1120	35.0	62	7.5	10.0	748	11.0	99.3
05...	1121	104	62	7.5	10.0	748	11.0	99.3
05...	1122	172	62	7.5	10.0	748	10.9	98.3
05...	1123	241	62	7.5	10.0	748	10.9	98.3
05...	1124	310	63	7.5	10.0	748	11.0	99.3

15266300 KENAI RIVER AT SOLDOTNA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	MEDIUM CODE	SAMPLE TYPE	STREAM WIDTH (FT) (00004)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM- PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	PURPOSE SITE VISIT (CODE) (50280)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)
OCT													
04...	1800	9	9	322	7.49	5590	10	3053	1001	67	7.6	--	7.0
NOV													
22...	1320	9	9	222	6.53	3030	10	3039	1001	67	7.6	--	3.0
JAN													
04...	1220	9	9	221	7.02	2100	10	3053	1001	72	7.8	--	.5
FEB													
07...	1120	9	9	220	6.50	3000	10	3053	1001	67	8.1	-1.0	1.0
MAR													
07...	1150	9	9	208	5.77	1740	10	3053	1001	70	7.5	5.5	1.5
MAY													
10...	1210	9	9	225	6.10	2490	10	3053	1001	72	8.0	.5	5.5
10...	1211	D	9	--	--	--	--	--	1099	--	--	--	--
JUN													
07...	1020	9	9	233	8.22	8450	10	3053	1001	63	8.1	15.5	6.5
21...	1320	9	9	335	9.45	12600	10	3053	1001	66	7.7	--	11.0
28...	1050	9	9	276	10.36	16900	10	3053	1001	62	7.9	22.5	9.5
JUL													
13...	1240	9	9	360	10.35	16400	10	3053	1001	64	7.6	16.0	11.5
24...	1140	9	9	350	10.67	18700	10	3053	1002	62	7.6	16.0	12.0
AUG													
08...	1130	9	9	365	9.94	16000	10	3053	1001	68	7.6	--	14.0
SEP													
05...	1130	9	9	345	10.63	19400	10	3053	1001	62	7.5	-	10.0

15266300 KENAI RIVER AT SOLDOTNA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	BARO- METRIC PRES- SURE (MMOF HG) (00025)	OXYGEN DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM DIS- SOLVED (MG/L AS NA) (00930)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT FIELD MG/S AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
OCT													
04...	763	12.2	100	28	9.82	.824	1.3	24	.85	29	23	6.2	.8
NOV													
22...	744	13.2	100	--	--	--	--	26	--	30	25	--	--
JAN													
04...	750	14.3	101	29	10.1	.991	1.4	27	.85	31	26	5.6	1.0
FEB													
07...	768	13.5	94	31	10.8	.923	1.4	28	.83	34	28	6.0	.9
MAR													
07...	758	--	--	31	10.7	1.11	1.5	28	.97	31	26	6.0	1.1
MAY													
10...	765	12.4	98	31	10.3	1.24	1.8	30	.85	36	30	5.0	1.1
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
07...	765	12.5	101	27	9.53	.838	1.3	24	.75	28	23	6.1	.9
21...	765	10.4	94	26	9.04	.741	1.1	22	.78	26	21	5.7	1.1
28...	766	12.2	106	26	9.27	.757	1.1	22	.78	25	20	6.2	.8
JUL													
13...	764	11.6	106	28	9.87	.790	1.2	24	.70	29	24	6.1	1.1
24...	768	10.4	96	28	9.99	.807	1.2	26	.70	30	25	6.4	.8
AUG													
08...	777	10.5	100	29	10.2	.812	1.2	23	.66	27	22	6.3	.8
SEP													
05...	748	11.0	99	28	9.96	.783	1.3	22	.70	25	21	6.3	.7

DATE	FLOU- RIDE DIS- SOLVED (MG/L AS F) (00950)	SILCA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOL- IDS, RISI- DUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOL- IDS, SUM OF CON- STITU- ENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMO- NIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMO- NIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMO- NIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
OCT													
04...	<.2	3.6	42	38	.001	.165	.045	.17	E.06	.029	.008	.009	20
NOV													
22...	--	--	--	--	<.001	.154	.017	<.08	<.10	.013	E.004	E.005	--
JAN													
04...	<.2	4.4	47	40	.002	.205	<.002	E.05	E.06	.009	E.004	<.007	20
FEB													
07...	<.2	3.9	41	42	.002	.180	.004	E.04	<.10	.006	E.003	<.007	20
MAR													
07...	<.2	4.4	47	42	.001	.152	.006	E.04	<.10	.009	E.003	<.007	40
MAY													
10...	<.2	4.7	53	43	.001	.084	<.002	.12	E.09	.011	<.006	<.007	110
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
07...	<.2	3.9	36	38	.001	.207	.003	E.08	<.10	.030	E.003	<.007	20
21...	E.1	3.4	38	35	<.001	.158	.002	.11	<.10	.042	<.006	<.007	10
28...	<.2	3.4	38	35	.001	.173	.007	E.08	<.10	.036	<.006	<.007	M
JUL													
13...	<.2	3.5	42	38	.001	.139	.002	E.06	<.10	.009	<.006	<.007	10
24...	<.2	3.6	35	39	.001	.157	.003	E.04	<.10	.014	<.006	<.007	M
AUG													
08...	<.2	3.5	56	37	.001	.130	.003	<.08	<.10	.011	<.006	<.007	M
SEP													
05...	<.2	3.5	44	36	.001	.142	<.002	E.07	<.10	.010	<.006	<.007	20

15266300 KENAI RIVER AT SOLDOTNA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CAR- BON, ORGANIC DIS- SOLVED (MG/L AS C)	CAR- BON, INOR- GANIC, PAR- TIC. TOTAL (MG/L AS C)	CAR- BON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C)	CAR- BON, INORG + ORGANIC PAR- TIC. TOTAL (MG/L AS C)	NITRO- GEN, PARTIC- ULATE WAT FLT SUSP (MG/L AS N)	CHLOR-A PERIPH- YTON CHROMO- GRAPHIC FLUO- ROM (MG/M2)	PERIPH- YTON BIO- MASS ASH WEIGHT G/SQ M	PERIPH- YTON BIO- MASS DRY WEIGHT G/SQ M	PHEO- PHYTTIN A, PERI- PHYTON (MG/M2)	SEDI- MENT, DIS- SUS- MENT, PENDE (MG/L)	SEDI- MENT, DIS- SUS- MENT, PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
	(01056)	(00681)	(00688)	(00689)	(00694)	(49570)	(70957)	(00572)	(00573)	(62359)	(80154)	(80155)	(70331)
OCT 04...	4.7	.74	<.1	.2	.2	.025	--	--	--	--	7	106	--
NOV 22...	--	.91	<.1	.2	.2	<.022	--	--	--	--	7	57	80
JAN 04...	9.7	.66	<.1	<.1	<.1	<.022	--	--	--	--	3	17	98
FEB 07...	6.5	.65	<.1	.2	.2	.034	--	--	--	--	2	16	100
MAR 07...	12.2	.76	<.1	.1	.2	.030	--	--	--	--	3	14	--
MAY 10...	7.4	2.0	--	--	.3	.035	--	--	--	--	--	--	--
MAY 10...	--	--	--	--	--	--	48.4	299.0	336.9	48	--	--	--
JUN 07...	5.3	1.1	--	--	.6	.035	--	--	--	--	33	753	66
JUN 21...	E2.5	1.1	--	--	.5	.055	--	--	--	--	44	1500	--
JUN 28...	E1.9	.82	--	--	E.6	.050	--	--	--	--	88	4020	--
JUL 13...	E1.8	1.5	--	--	.3	<.022	--	--	--	--	27	1200	--
JUL 24...	<3.0	.68	--	--	.3	.028	--	--	--	--	34	1720	74
AUG 08...	<3.0	.77	--	--	E.2	E.027	--	--	--	--	8	346	--
SEP 05...	<3.0	.59	--	--	.2	.040	--	--	--	--	19	995	59

15266300 KENAI RIVER AT SOLDOTNA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	5640	---	---	3260	---	---	2910	---	---
2	5550	---	---	3170	---	---	2880	---	---
3	5490	---	---	3100	---	---	2660	---	---
4	5470	7	103	2990	---	---	2700	---	---
5	5550	---	---	2950	---	---	2890	---	---
6	5570	---	---	2920	---	---	2740	---	---
7	5480	---	---	2850	---	---	2780	---	---
8	5160	---	---	2660	---	---	2710	---	---
9	5050	---	---	2700	---	---	2660	---	---
10	4950	---	---	3030	---	---	2620	---	---
11	4830	---	---	2970	---	---	2590	---	---
12	4750	---	---	2760	---	---	2510	---	---
13	4700	---	---	2880	---	---	2440	---	---
14	4960	---	---	2870	---	---	2390	---	---
15	4910	---	---	2660	---	---	2290	---	---
16	4800	---	---	2740	---	---	2270	---	---
17	4590	---	---	2810	---	---	2300	---	---
18	4390	---	---	2730	---	---	2330	---	---
19	4290	---	---	2850	---	---	2400	---	---
20	4210	---	---	2880	---	---	2370	---	---
21	4120	---	---	3020	---	---	2270	---	---
22	4140	---	---	3100	7	59	2290	---	---
23	4000	---	---	3060	---	---	2140	---	---
24	3930	---	---	3100	---	---	2150	---	---
25	4030	---	---	2880	---	---	2170	---	---
26	3840	---	---	2690	---	---	2110	---	---
27	3660	---	---	2640	---	---	1960	---	---
28	3500	---	---	2730	---	---	2090	---	---
29	3380	---	---	2980	---	---	2190	---	---
30	3480	---	---	3020	---	---	2280	---	---
31	3430	---	---	---	---	---	2370	---	---
TOTAL	141850	---	---	87000	---	---	75460	---	---
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	2210	---	---	3780	---	---	1840	---	---
2	2180	---	---	3580	---	---	1820	---	---
3	2210	---	---	3460	---	---	1870	---	---
4	2120	3	17	3300	---	---	1890	---	---
5	2110	---	---	3190	---	---	1790	---	---
6	2160	---	---	3240	---	---	1750	---	---
7	2430	---	---	3030	2	16	1710	3	14
8	2540	---	---	2960	---	---	1730	---	---
9	2510	---	---	2840	---	---	1730	---	---
10	2550	---	---	2810	---	---	1770	---	---
11	e2500	---	---	2690	---	---	1960	---	---
12	e2500	---	---	2670	---	---	1790	---	---
13	2550	---	---	2580	---	---	1690	---	---
14	2770	---	---	e2500	---	---	1760	---	---
15	3020	---	---	e2400	---	---	1740	---	---
16	3300	---	---	2450	---	---	1700	---	---
17	3370	---	---	2500	---	---	1640	---	---
18	3620	---	---	2250	---	---	1620	---	---
19	4000	---	---	2300	---	---	1650	---	---
20	4160	---	---	2220	---	---	1630	---	---
21	4230	---	---	2120	---	---	1590	---	---
22	4340	---	---	2030	---	---	1560	---	---
23	4410	---	---	1970	---	---	1530	---	---
24	4510	---	---	e1900	---	---	1580	---	---
25	4460	---	---	e1900	---	---	1570	---	---
26	4480	---	---	e1800	---	---	1510	---	---
27	4300	---	---	e1800	---	---	1490	---	---
28	4160	---	---	1840	---	---	1440	---	---
29	4010	---	---	---	---	---	1350	---	---
30	3920	---	---	---	---	---	1360	---	---
31	3940	---	---	---	---	---	1370	---	---
TOTAL	101570	---	---	72110	---	---	51430	---	---

15266300 KENAI RIVER AT SOLDOTNA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	1340	---	---	2330	---	---	5850	67	1060
2	1350	---	---	2330	---	---	6370	57	980
3	1670	---	---	2300	---	---	6770	71	1300
4	1530	---	---	2290	---	---	7320	79	1560
5	1430	---	---	2310	---	---	7700	51	1060
6	1450	---	---	2350	---	---	8050	47	1020
7	1480	---	---	2390	---	---	8420	41	932
8	1540	---	---	2390	---	---	8660	31	725
9	1560	---	---	2460	---	---	8900	35	841
10	1810	---	---	2500	---	---	9120	28	689
11	2220	---	---	2550	---	---	9340	40	1010
12	2170	---	---	2630	---	---	9590	48	1240
13	2140	---	---	2730	---	---	9810	31	821
14	2140	---	---	2800	2	15	9970	32	861
15	2170	---	---	2980	2	16	10200	---	---
16	2170	---	---	2970	10	80	10500	42	1190
17	2170	---	---	3010	23	187	11100	63	1890
18	2140	---	---	3070	7	58	11600	81	2540
19	2140	---	---	3170	11	94	12000	---	---
20	2210	---	---	3330	9	81	12300	56	1860
21	2400	---	---	3540	14	134	12600	56	1910
22	2450	---	---	3660	18	178	13000	58	2040
23	2500	---	---	3790	17	174	13600	39	1430
24	2480	---	---	3940	10	106	14200	---	---
25	2460	---	---	4110	25	277	15000	---	---
26	2450	---	---	4290	15	174	15600	74	3120
27	2490	---	---	4510	22	268	16300	83	3650
28	2550	---	---	4770	12	155	16900	82	3740
29	2500	---	---	4930	23	306	17600	83	3940
30	2450	---	---	5280	49	699	18200	77	3780
31	---	---	---	5570	48	722	---	---	---
TOTAL	61560	---	---	101280	---	---	336570	---	---
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY			AUGUST			SEPTEMBER			
1	18400	---	---	18100	19	929	19300	44	2290
2	18300	56	2770	17800	22	1060	19500	25	1320
3	18100	43	2100	17500	17	803	19800	---	---
4	18300	40	1980	17300	24	1120	19600	35	1850
5	18400	46	2290	17000	8	367	19300	27	1410
6	18600	42	2110	16700	12	541	18600	30	1510
7	18200	34	1670	16200	23	1010	17800	42	2020
8	17800	38	1830	16000	4	173	17000	14	643
9	17700	35	1670	15900	18	773	16200	13	569
10	17300	44	2060	15800	19	811	15400	9	374
11	17200	26	1210	15500	15	628	14500	11	431
12	17000	24	1100	15300	9	372	13800	17	633
13	16800	20	907	15000	15	608	13200	6	214
14	16400	30	1330	15000	7	284	12500	12	405
15	16200	25	1090	15000	9	364	12100	8	261
16	16300	21	924	15100	17	693	12000	---	---
17	16200	24	1050	15300	13	537	12100	8	261
18	15900	11	472	15500	18	753	12200	6	198
19	16200	10	437	15900	13	558	12500	8	270
20	16800	---	---	16200	15	656	13000	10	351
21	17600	61	2900	16700	26	1170	13500	12	437
22	18100	45	2200	16600	11	493	14100	8	305
23	18400	40	1990	16700	15	676	15200	23	944
24	18700	36	1820	16600	8	359	16700	33	1490
25	18900	38	1940	16600	23	1030	17000	6	275
26	19200	26	1350	16400	14	620	16800	18	816
27	19500	31	1630	15900	8	343	16200	20	875
28	19200	20	1040	15700	8	339	15400	13	541
29	19000	19	975	17200	---	---	14600	8	315
30	18800	27	1370	18300	42	2080	13600	8	294
31	18300	8	395	18800	26	1320	---	---	---
TOTAL	551800	---	---	507600	---	---	463500	---	---

15266300 KENAI RIVER AT SOLDOTNA--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	7.0	6.0	6.5	4.0	3.0	3.0	2.0	.0	1.0	2.0	1.0	1.5
2	7.0	6.0	6.5	3.0	2.5	2.5	.5	.0	.0	1.5	.5	1.0
3	7.0	6.5	6.5	3.0	2.5	3.0	1.0	.0	.5	1.0	.0	.5
4	7.0	6.5	7.0	3.0	2.0	2.5	1.5	.5	1.0	1.0	.0	.5
5	7.0	6.0	6.5	3.5	2.5	3.0	3.0	1.5	2.0	1.0	.0	.5
6	7.5	6.5	7.0	3.0	2.0	2.5	2.5	2.0	2.5	.5	.0	.0
7	7.5	6.5	7.0	3.0	2.0	2.5	3.0	2.0	2.5	1.0	.0	.5
8	7.0	6.0	6.5	3.0	1.5	2.5	2.5	1.5	2.0	2.0	1.0	1.5
9	7.0	6.0	6.5	3.5	2.5	3.0	2.5	1.5	2.0	1.5	1.0	1.5
10	6.0	5.0	5.5	4.0	3.0	3.5	2.0	1.5	1.5	1.5	.0	1.0
11	6.0	5.0	5.5	4.0	2.5	3.5	2.5	1.5	2.0	.5	.0	.0
12	6.5	5.5	6.0	2.5	2.0	2.5	2.5	1.5	2.0	.5	.0	.0
13	6.0	5.0	6.0	3.5	2.5	3.0	2.0	1.0	1.5	1.5	.5	1.0
14	6.5	5.5	6.0	3.0	2.5	3.0	1.5	.5	1.0	2.5	1.0	1.5
15	6.0	5.0	5.5	2.5	1.5	2.0	1.0	.0	.5	2.5	1.5	2.0
16	6.0	5.5	5.5	3.0	2.0	2.5	1.0	.0	.5	2.0	1.0	1.0
17	6.0	5.0	5.5	3.0	2.0	2.5	.5	.0	.0	1.5	.5	1.0
18	5.5	5.0	5.5	3.0	2.0	2.5	2.0	.0	1.0	2.5	1.5	2.0
19	5.5	4.0	5.0	3.5	2.5	3.0	2.5	1.5	2.0	2.5	2.0	2.0
20	5.5	4.5	5.0	3.5	3.0	3.5	2.0	1.5	2.0	2.0	1.5	2.0
21	5.0	3.5	4.5	3.5	3.0	3.0	2.0	.5	1.5	2.0	1.5	2.0
22	4.5	3.5	4.0	3.0	2.5	3.0	.5	.0	.0	2.5	1.5	2.0
23	5.0	4.0	4.5	3.0	2.0	2.5	.5	.0	.5	2.0	1.5	2.0
24	5.0	4.0	4.5	2.5	1.5	2.0	1.0	.5	1.0	2.0	1.5	2.0
25	5.0	4.5	4.5	2.0	1.5	1.5	1.0	.5	1.0	2.0	1.5	1.5
26	4.5	4.0	4.5	2.0	.5	1.0	1.5	1.0	1.0	2.0	1.5	2.0
27	4.0	3.0	3.5	2.0	1.5	2.0	1.5	.5	1.0	2.0	1.5	2.0
28	3.5	2.5	3.0	3.0	2.0	2.5	2.0	1.0	1.5	1.5	.5	1.0
29	4.0	3.0	3.5	3.5	2.5	3.0	2.5	1.5	2.0	1.5	.5	1.0
30	3.5	2.5	3.0	3.0	2.0	3.0	2.5	1.5	2.0	1.0	.5	1.0
31	4.0	2.5	3.5	---	---	---	2.0	1.5	2.0	1.5	.5	1.0
MONTH	7.5	2.5	5.3	4.0	.5	2.7	3.0	.0	1.3	2.5	.0	1.2
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1.0	.0	1.0	1.0	.0	.5	3.0	.0	1.5	6.0	4.0	5.0
2	1.0	.0	.5	1.0	.0	.5	3.5	1.0	2.5	5.0	3.0	4.0
3	1.0	.0	.5	.5	.0	.0	3.0	2.0	2.5	4.5	3.0	3.5
4	1.0	.0	.5	1.0	.0	.0	3.0	2.0	2.5	4.0	2.0	3.0
5	1.0	.5	.5	2.0	.5	1.5	3.5	.0	2.0	5.0	1.5	3.5
6	1.5	.5	1.0	2.0	1.0	1.5	3.0	.5	2.0	5.5	3.5	4.5
7	2.0	.5	1.5	2.5	1.0	2.0	3.0	1.0	2.0	6.5	4.0	5.0
8	1.0	.0	.0	1.5	.5	1.0	4.5	1.5	3.0	6.5	4.0	5.0
9	.5	.0	.0	2.0	.5	1.5	3.5	1.5	2.5	6.5	4.5	5.5
10	.5	.0	.0	3.0	1.5	2.0	3.5	1.5	3.0	7.0	4.5	6.0
11	.5	.0	.0	3.0	2.0	2.5	4.5	2.0	3.0	8.0	4.0	6.0
12	1.0	.0	.5	3.0	2.0	2.5	4.0	2.0	3.0	9.0	5.0	7.0
13	1.0	.0	.0	2.5	.5	1.5	4.0	1.5	2.5	9.5	5.5	7.5
14	.5	.0	.0	2.5	1.0	2.0	5.0	1.5	3.0	10.0	6.0	8.0
15	.5	.0	.0	2.0	1.0	1.5	4.0	1.5	3.0	10.5	7.5	9.0
16	.5	.0	.0	3.0	1.0	2.0	4.5	2.0	3.0	9.5	7.5	8.0
17	1.0	.0	.5	2.5	.5	1.5	4.5	2.0	3.0	8.5	6.0	7.5
18	1.0	.0	.5	1.5	.0	1.0	5.0	2.0	3.0	9.5	6.5	8.0
19	2.0	.0	1.0	1.0	.0	.5	5.0	2.5	3.5	8.5	6.0	7.0
20	2.0	1.0	1.5	1.0	.0	.5	5.5	2.0	4.0	9.0	6.5	7.5
21	2.0	1.5	1.5	1.0	.0	.5	5.5	3.5	4.5	8.5	7.0	8.0
22	1.5	1.0	1.5	.5	.0	.0	6.0	3.0	4.5	7.5	5.5	6.5
23	1.5	.0	.5	.5	.0	.0	5.5	3.0	4.0	7.5	5.0	6.5
24	.5	.0	.0	.0	.0	.0	6.0	2.5	4.5	7.5	5.5	6.5
25	.5	.0	.0	.5	.0	.0	5.5	3.5	4.5	7.0	5.5	6.0
26	1.0	.0	.5	2.0	.0	1.0	7.0	4.0	5.5	6.5	5.0	5.5
27	1.5	.5	1.0	3.0	1.0	2.0	6.0	4.0	5.0	8.5	4.5	6.5
28	1.0	.0	.5	3.5	1.5	2.5	5.5	4.0	4.5	9.5	7.0	8.0
29	---	---	---	3.0	1.0	2.0	7.0	3.5	5.0	9.5	7.5	8.5
30	---	---	---	2.0	.5	1.0	7.0	4.5	6.0	9.0	7.0	8.0
31	---	---	---	3.0	.0	1.5	---	---	---	8.0	6.5	7.5
MONTH	2.0	.0	.5	3.5	.0	1.2	7.0	.0	3.4	10.5	1.5	6.4

15271000 SIXMILE CREEK NEAR HOPE

LOCATION.--Lat 60°49'15", long 149°25'31", in SW¹/₄ SE¹/₄ sec. 34, T. 8 N., R. 1 W. (Seward D-7 quad), Kenai Peninsula Borough, Hydrologic Unit 19020302, Chugach National Forest, on left bank, 6.0 mi upstream from mouth at Turnagain Arm, and 10.6 mi southeast of Hope.

DRAINAGE AREA.-- 234 mi²

PERIOD OF RECORD.--June 1979 to September 1990, August 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 250 ft above sea level, from topographic map. Prior to November 26, 1979, recording gage at site 0.8 mi downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Rain gage at station. GOES satellite telemetry at station.

EXTREMES FOR CURRENT PERIOD.--Peak discharges greater than base discharge of 3,500 ft³/s and maximum (*)

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Jun 28	01:45	6370	12.73	Aug 29	02:30	*6930	*12.94
Jul 20	10:15	4050	11.72				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	635	409	296	482	282	174	129	488	2690	4150	2170	2510
2	608	394	294	399	258	167	131	449	2990	4170	2190	2030
3	582	368	399	375	260	161	134	424	3140	4180	2230	1970
4	564	361	352	340	272	178	132	384	2990	3890	2160	1910
5	596	377	347	298	269	166	128	348	2890	4150	2030	1940
6	604	363	341	316	252	163	126	329	2900	3990	1890	1580
7	738	359	318	389	237	160	126	328	2670	3790	1780	1420
8	1110	346	294	388	226	156	127	355	2560	3710	1720	1230
9	811	347	264	345	222	161	126	399	2710	3460	1640	1100
10	728	376	332	314	217	158	129	426	3000	3340	1550	1010
11	706	405	291	301	234	159	145	480	3140	3160	1470	937
12	681	328	277	304	225	158	149	533	3040	3070	1590	1230
13	653	355	262	288	194	154	147	598	3000	2890	1680	1430
14	1000	359	305	324	190	154	144	702	3140	2740	1780	1110
15	866	320	352	506	222	160	143	870	3550	2800	1700	1010
16	957	346	291	460	214	156	149	1040	3900	2760	1640	959
17	994	338	265	512	194	150	154	1110	4370	2860	1520	1010
18	843	338	276	777	185	142	163	1130	4540	2910	1570	1070
19	747	350	281	1230	204	137	179	1170	4430	3100	1410	1130
20	682	409	276	811	187	141	199	1410	4240	3780	2200	996
21	628	624	284	660	182	142	216	1530	4470	3500	1900	1100
22	638	579	255	587	177	141	232	1530	4750	3400	1610	1090
23	601	489	302	516	e175	156	258	1460	5260	3060	1330	1350
24	557	472	274	446	e180	146	263	1480	5600	2750	1210	3110
25	554	429	308	398	199	148	292	1480	5290	2690	1110	2280
26	515	362	288	369	186	148	330	1420	5570	2670	1020	1730
27	459	321	276	350	194	147	374	1400	5850	2640	1010	1430
28	403	398	282	306	186	138	460	1640	5890	2520	2870	1350
29	424	369	396	322	---	135	472	1960	5480	2300	4710	1220
30	466	339	595	309	---	135	487	2290	4670	2190	3550	1060
31	446	---	619	295	---	132	---	2560	---	2230	3360	---
TOTAL	20796	11630	9992	13717	6023	4723	6244	31723	118720	98850	59600	43302
MEAN	671	388	322	442	215	152	208	1023	3957	3189	1923	1443
MAX	1110	624	619	1230	282	178	487	2560	5890	4180	4710	3110
MIN	403	320	255	288	175	132	126	328	2560	2190	1010	937
AC-FT	41250	23070	19820	27210	11950	9370	12380	62920	235500	196100	118200	85890
CFSM	2.87	1.66	1.38	1.89	.92	.65	.89	4.37	16.9	13.6	8.22	6.17
IN.	3.31	1.85	1.59	2.18	.96	.75	.99	5.04	18.87	15.71	9.47	6.88

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2001, BY WATER YEAR (WY)#

	MEAN	MAX	(WY)	MIN	(WY)
1979	888	1777	1981	500	1998
1980	420	654	1980	221	1986
1981	267	353	2000	198	1999
1982	231	528	1981	133	1999
1983	175	306	1981	113	1999
1984	155	240	1984	106	1999
1985	250	397	1990	119	1985
1986	1237	1811	1981	748	1985
1987	2729	3957	2001	1736	1989
1988	2289	3986	1980	1166	1990
1989	1331	2699	1981	760	1990
1990	1046	1556	1999	607	1983

See Period of Record; partial years used in monthly statistics
e Estimated

15271000 SIXMILE CREEK NEAR HOPE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1979 - 2001#	
ANNUAL TOTAL	337082		425320			
ANNUAL MEAN	921		1165		930	
HIGHEST ANNUAL MEAN					1335	1980
LOWEST ANNUAL MEAN					675	1986
HIGHEST DAILY MEAN	4520	Jun 8	5890	Jun 28	7570	Jul 12 1980
LOWEST DAILY MEAN	a137	Apr 1	b126	Apr 6	80	cApr 1 1986
ANNUAL SEVEN-DAY MINIMUM	140	Mar 22	128	Apr 4	80	Apr 1 1986
MAXIMUM PEAK FLOW			6930	Aug 29	d8070	Jul 2 1980
MAXIMUM PEAK STAGE			12.94	Aug 29	13.22	Jul 2 1980
INSTANTANEOUS LOW FLOW					f29.0	Nov 26 1979
ANNUAL RUNOFF (AC-FT)	668600		843600		674100	
ANNUAL RUNOFF (CFSM)	3.94		4.98		3.98	
ANNUAL RUNOFF (INCHES)	53.59		67.61		54.03	
10 PERCENT EXCEEDS	2670		3120		2450	
50 PERCENT EXCEEDS	526		487		554	
90 PERCENT EXCEEDS	150		157		140	

See Period of Record; partial years used in monthly statistics

a Apr. 1 and Apr. 2

b Apr. 6, Apr. 7 and Apr. 9

c Apr. 1 to Apr. 9, 1986

d Peak discharge was probably greater sometime during the period, Nov. 26, 1979 to Jan. 9, 1980, during release from storage behind snow-avalanche dam upstream from former gage site

f Sometime between Nov. 26, 1979 and Jan. 9, 1980, during release from storage behind snow-avalanche dam upstream from former gage site, site and datum then in use

15272280 PORTAGE CREEK AT PORTAGE LAKE OUTLET NEAR WHITTIER

LOCATION.--Lat 60°47'07", long 148°50'20", in SW¹/₄ NE¹/₄ sec. 13, T. 8 N., R. 3 E. (Seward D-5 SW quad), Municipality of Anchorage, Hydrologic Unit 19020302, on left bank at lake outlet, 5.0 mi west of Whittier, 5.8 mi southeast of Portage, and 6.5 mi upstream from mouth.

DRAINAGE AREA.--40.5 mi².

PERIOD OF RECORD.--March 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 95 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good except for March 1-4, which are fair.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 12,500 ft³/s, August 19, 1984 (elevation about 97.05 ft above sea level from USFS levels) by contracted-opening measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 4,600 ft³/s and maximum (*).

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Aug 20	1415	4690	7.18	Sep 24	0515	4620	7.14
Aug 29	0100	*9200	*9.23				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	423	195	231	560	222	179	103	238	584	1770	1630	3280
2	360	185	194	392	187	159	101	224	665	1750	1730	2010
3	315	169	185	289	159	123	148	217	779	1810	1830	1490
4	287	159	219	232	143	128	141	207	814	1770	1820	1880
5	351	151	289	191	144	192	119	193	795	2020	1770	2880
6	706	150	296	184	152	248	104	206	788	2150	1700	1890
7	1370	155	283	401	138	248	94	193	743	1830	1630	1420
8	1530	153	237	485	121	219	89	171	691	1580	1540	1100
9	990	160	199	415	108	254	87	162	694	1480	1440	867
10	725	287	193	286	100	241	98	164	738	1480	1350	720
11	625	408	201	239	98	245	155	157	817	1520	1310	640
12	543	346	175	252	101	224	184	147	860	1780	1420	1660
13	527	328	151	233	97	205	178	143	841	1770	1630	2830
14	1280	392	133	478	91	192	154	142	853	1570	1850	2510
15	1150	319	127	843	84	226	136	155	944	1520	1870	2030
16	1350	329	118	572	81	240	121	183	1080	1470	1780	1440
17	1430	377	136	652	75	196	111	207	1190	1470	1640	1650
18	915	484	169	1150	71	161	104	226	1220	1550	1970	1600
19	627	621	176	1530	71	138	100	253	1240	1680	2110	1330
20	468	1060	189	800	74	122	98	303	1200	2560	4130	1100
21	378	1440	219	628	71	107	101	420	1210	3080	3690	1290
22	362	1200	194	689	69	95	104	594	1280	3760	2710	1460
23	350	740	172	613	67	96	109	514	1490	3660	2020	2660
24	307	610	207	441	65	89	110	445	1740	2730	1730	4170
25	404	530	314	369	69	93	144	433	1750	2160	1600	2580
26	377	398	402	312	93	112	187	422	1870	1890	1510	1750
27	312	318	452	276	192	134	204	393	2060	1780	1720	1240
28	262	329	454	215	209	122	323	386	2210	1660	4710	1270
29	227	348	717	179	---	113	327	412	2220	1490	7970	1130
30	226	289	854	162	---	120	274	455	1980	1420	6530	846
31	215	---	807	180	---	116	---	516	---	1530	5580	---
TOTAL	19392	12630	8693	14248	3152	5137	4308	8881	35346	59690	75920	52723
MEAN	626	421	280	460	113	166	144	286	1178	1925	2449	1757
MAX	1530	1440	854	1530	222	254	327	594	2220	3760	7970	4170
MIN	215	150	118	162	65	89	87	142	584	1420	1310	640
AC-FT	38460	25050	17240	28260	6250	10190	8540	17620	70110	118400	150600	104600
CFSM	15.4	10.4	6.92	11.3	2.78	4.09	3.55	7.07	29.1	47.5	60.5	43.4
IN.	17.81	11.60	7.98	13.09	2.90	4.72	3.96	8.16	32.47	54.83	69.73	48.43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2001, BY WATER YEAR (WY)#												
MEAN	532	235	124	126	118	87.9	244	610	1433	2116	2047	1870
MAX	1014	553	280	460	277	189	393	1158	1728	2518	3164	3583
(WY)	1994	1998	2001	2001	1997	1998	1995	1995	1990	1990	1989	1995
MIN	136	90.5	26.3	26.0	26.0	26.0	111	286	1178	1714	1409	649
(WY)	1997	1991	1991	1991	1991	1991	1999	2001	2001	1999	1998	1992

See Period of Record: partial years used in monthly statistics

15272280 PORTAGE CREEK AT PORTAGE LAKE OUTLET NEAR WHITTIER--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1989 - 2001#	
ANNUAL TOTAL	248821		300120			
ANNUAL MEAN	680		822		786	
HIGHEST ANNUAL MEAN					972	1995
LOWEST ANNUAL MEAN					656	2000
HIGHEST DAILY MEAN	4110	Jul 22	7970	Aug 29	10700	Sep 20 1995
LOWEST DAILY MEAN	a55	Jan 18	65	Feb 24	b26	Dec 5 1990
ANNUAL SEVEN-DAY MINIMUM	56	Jan 16	69	Feb 19	26	Dec 5 1990
MAXIMUM PEAK FLOW			9200	Aug 29	13000	Sep 20 1995
MAXIMUM PEAK STAGE			9.23	Aug 29	10.66	Sep 20 1995
INSTANTANEOUS LOW FLOW			59	Feb 25	26	Dec 5 1990
ANNUAL RUNOFF (AC-FT)	493500		595300		569500	
ANNUAL RUNOFF (CFSM)	16.8		20.3		19.4	
ANNUAL RUNOFF (INCHES)	228.55		275.67		263.73	
10 PERCENT EXCEEDS	1690		1860		2040	
50 PERCENT EXCEEDS	345		386		329	
90 PERCENT EXCEEDS	91		110		55	

See Period of Record: partial years used in monthly statistics

a Jan. 18 to Jan. 22

b From Dec. 5, 1990 to Mar. 31, 1991

15272380 TWENTYMILE RIVER BELOW GLACIER RIVER NEAR PORTAGE

LOCATION.--Lat 60°53'35", long 148°55'38", in SW¹/₄ SW¹/₄ SE¹/₄ sec. 4, T. 9 N., R. 3 E. (Seward D-6 quad), hydrologic unit 19020401, on right bank, 0.1 miles below Glacier River, 4.0 miles upstream from the Seward Highway, and 6.0 miles northeast of Portage.

DRAINAGE AREA.--141 mi².

PERIOD OF RECORD.--April to September 2001.

GAGE.--Water-stage recorder. Elevation of gage is 50 ft above sea level, from topographic map.

REMARKS.--Record is good except for June 16 to July 25, August 2 to 4, 19, 20, September 13 to 15, and estimated daily discharges, which are poor. GOES satellite telemetry at station.

EXTREMES FOR CURRENT PERIOD.-- Maximum discharge, 9,990 ft³/s, August 29, gage height 25.47 ft.; minimum discharge not determined, occurs during winter.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	e195	547	1760	3490	e2900	4400
2	---	---	---	---	---	---	e195	520	1940	3470	3010	3240
3	---	---	---	---	---	---	258	533	2090	3360	3170	2820
4	---	---	---	---	---	---	271	468	2020	3170	3170	3150
5	---	---	---	---	---	---	226	416	2020	3300	3060	4330
6	---	---	---	---	---	---	197	483	2070	3290	3000	3250
7	---	---	---	---	---	---	183	490	1920	3010	2890	2730
8	---	---	---	---	---	---	180	439	1750	2810	2710	2330
9	---	---	---	---	---	---	178	438	1870	2650	2600	2020
10	---	---	---	---	---	---	191	433	2070	2660	2440	1810
11	---	---	---	---	---	---	344	421	2220	2630	2370	1650
12	---	---	---	---	---	---	438	412	2220	2800	2590	2160
13	‡758	---	---	---	---	---	345	432	2090	2790	2900	3090
14	---	---	---	---	---	---	294	505	2160	2720	3190	2840
15	---	---	---	---	---	---	263	603	2380	2760	3250	2530
16	---	‡552	---	---	---	---	264	681	2700	2650	3140	2200
17	---	---	---	---	---	---	254	730	3040	2770	2970	2440
18	---	---	---	---	---	---	243	788	3150	2880	3070	2580
19	---	---	---	---	---	---	243	866	2960	3030	3100	2380
20	---	---	---	---	---	---	247	1010	2850	4350	5770	2110
21	---	---	---	---	---	---	267	1090	3010	4700	5360	2130
22	---	---	---	---	---	---	282	1170	3230	4990	4070	2070
23	---	---	---	---	---	---	300	1130	3700	4770	3150	2640
24	---	---	---	---	---	---	295	1130	3990	3980	2910	4030
25	---	---	---	---	---	---	394	1100	3800	3360	2760	3070
26	---	---	---	---	---	---	437	1060	3960	e3200	2580	2510
27	---	---	---	---	---	---	464	1060	4390	e3100	2520	2080
28	---	---	---	---	---	---	733	1190	4530	e2900	5130	1940
29	---	---	---	---	---	---	626	1390	4320	e2800	9230	1860
30	---	---	---	---	---	---	559	1460	3840	e2700	8090	1600
31	---	---	---	---	---	---	---	1630	---	e2800	6610	---
TOTAL	---	---	---	---	---	---	9366	24625	84050	99890	113710	77990
MEAN	---	---	---	---	---	---	312	794	2802	3222	3668	2600
MAX	---	---	---	---	---	---	733	1630	4530	4990	9230	4400
MIN	---	---	---	---	---	---	178	412	1750	2630	2370	1600
AC-FT	---	---	---	---	---	---	18580	48840	166700	198100	225500	154700
CFSM	---	---	---	---	---	---	2.21	5.63	19.9	22.9	26.0	18.4
IN.	---	---	---	---	---	---	2.47	6.50	22.17	26.35	30.00	20.58

‡ Result of discharge measurement
e Estimated

15274000 SOUTH FORK CAMPBELL CREEK NEAR ANCHORAGE

LOCATION.--Lat 61°10'02", long 149°46'14", in NW¼ sec. 2, T. 12 N., R. 3 W. (Anchorage A-8 quad), Municipality of Anchorage, 0.2 mi downstream from bridge on dog-mushing trail leading to Campbell Airstrip, 2.0 mi upstream from North Fork Campbell Creek, and 5.5 mi southeast of Anchorage.

DRAINAGE AREA.--29.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1947 to September 1971, October 1998 to September 2001, (discontinued)

REVISED RECORD.-- WRD AK-00-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 260 ft, from topographic map. Prior to August 20, 1952, water-stage recorder at site 0.2 mi upstream at different datum. August 20, 1952 to July 15, 1958, water-stage recorder at site 70 ft downstream from previous site at different datum; July 16, 1958 to September 30, 1971, water-stage recorder at same site but different datum. October 1, 1971 to September 30, 1972, crest-stage gage at same site but different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft³/s and maximums (*).

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
June 15	1400	162	6.20	July 06	unknown	*243	*a6.52
June 25	0130	157	6.18	July 20	unknown	unknown	unknown

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	e28	e21	e13	e10	e11	e8.0	12	69	e100	e48	38
2	57	e28	e20	e13	e10	e11	7.6	9.8	77	e90	e46	37
3	54	e28	e20	e12	e10	e11	5.1	10	107	e85	55	54
4	51	e27	e20	e12	e10	e11	5.1	10	120	e90	64	62
5	53	e27	e21	e11	e9.5	e11	6.8	9.0	111	e120	56	96
6	53	e27	e21	e11	e9.0	e12	8.1	8.5	117	e160	50	78
7	48	e27	e21	e12	e9.0	12	6.4	8.7	124	109	47	67
8	45	e27	e21	e12	e9.0	12	6.8	9.5	96	124	46	61
9	41	e27	e20	e11	e8.5	11	6.6	10	96	110	45	52
10	40	e27	e20	e11	e8.5	12	6.3	10	94	96	43	48
11	40	39	e20	e11	e8.5	9.0	6.6	12	96	106	41	45
12	39	29	e19	e12	e8.5	8.2	6.2	13	100	95	40	44
13	38	30	e19	e12	e8.5	9.8	6.2	16	100	87	39	44
14	39	27	e19	e12	e8.5	9.7	6.3	21	95	e80	39	43
15	37	e26	e19	e12	e8.5	9.7	6.6	26	135	78	42	40
16	36	e26	e18	e12	e8.5	9.1	6.5	29	121	e70	43	39
17	35	e26	e17	e12	e9.0	9.6	6.4	31	115	e65	42	39
18	34	25	e17	e12	e9.0	e9.5	6.6	31	106	e65	45	40
19	34	27	e17	e12	e9.0	e9.5	7.0	31	112	e75	42	41
20	33	27	e18	e12	e9.0	e9.5	7.8	37	116	e150	46	39
21	e33	26	e17	e11	e9.0	e9.0	8.3	35	118	e130	41	38
22	e33	24	e17	e11	e9.5	e9.0	8.2	32	121	e110	39	37
23	33	25	e16	e11	e9.5	e9.0	8.8	33	126	e95	37	36
24	33	e24	e15	e11	e10	e9.0	8.5	33	133	e75	38	36
25	33	e24	e15	e11	e11	e9.0	9.6	34	138	e65	37	35
26	33	e24	e14	e11	e12	e9.5	10	34	e140	60	35	33
27	e31	e24	e14	e11	e12	e10	11	36	e140	54	33	33
28	e31	e24	e13	e11	e11	e9.5	11	41	e130	51	40	32
29	e29	e23	e13	e10	---	e9.0	10	51	e120	48	58	32
30	e29	e22	e13	e10	---	8.3	12	60	e110	e46	45	31
31	e31	---	e14	e10	---	8.4	---	65	---	e50	41	---
TOTAL	1216	795	549	355	264.5	307.3	230.4	798.5	3383	2739	1363	1350
MEAN	39.2	26.5	17.7	11.5	9.45	9.91	7.68	25.8	113	88.4	44.0	45.0
MAX	60	39	21	13	12	12	12	65	140	160	64	96
MIN	29	22	13	10	8.5	8.2	5.1	8.5	69	46	33	31
AC-FT	2410	1580	1090	704	525	610	457	1580	6710	5430	2700	2680
CFSM	1.34	.91	.61	.39	.32	.34	.26	.88	3.87	3.03	1.51	1.54
IN.	1.55	1.01	.70	.45	.34	.39	.29	1.02	4.31	3.49	1.74	1.72

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2001, BY WATER YEAR (WY)#

	MEAN	MAX	(WY)	MIN	(WY)
44.4	26.5	17.1	12.7	9.12	7.46
83.7	56.2	31.1	33.3	17.1	12.0
1962	1953	1961	1961	1961	1964
19.3	11.5	10.6	5.99	4.02	3.44
1951	1951	1969	1965	1969	1970
8.42	34.3	96.6	77.1	61.9	60.9
62.8	166	151	94.3	122	
1960	1962	1963	1949	1960	
10.5	49.2	37.8	31.8	21.1	
1971	1971	1954	1969	1969	

See Period of Record; partial years used in monthly statistics
a From crest-stage gage
e Estimated

15274000 SOUTH FORK CAMPBELL CREEK NEAR ANCHORAGE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1947 - 2001#	
ANNUAL TOTAL	14980.6		13350.7			
ANNUAL MEAN	40.9		36.6		38.2	
HIGHEST ANNUAL MEAN					50.9	
LOWEST ANNUAL MEAN					20.5	
HIGHEST DAILY MEAN	182	Jul 18	160	Jul 6	572	Jun 21 1949
LOWEST DAILY MEAN	6.3	Apr 11	b5.1	Apr 3	c2.0	Mar 28 1964
ANNUAL SEVEN-DAY MINIMUM	6.7	Apr 7	6.4	Apr 10	2.6	Mar 24 1964
MAXIMUM PEAK FLOW			243	Jul 6	891	Jun 21 1949
MAXIMUM PEAK STAGE			a6.52	Jul 6	df6.40	Nov 10 1965
INSTANTANEOUS LOW FLOW			4.0	Apr 3	.00	Oct 12 1958
ANNUAL RUNOFF (AC-FT)	29710		26480		27650	
ANNUAL RUNOFF (CFSM)	1.40		1.25		1.31	
ANNUAL RUNOFF (INCHES)	19.10		17.03		17.78	
10 PERCENT EXCEEDS	111		96		88	
50 PERCENT EXCEEDS	27		27		25	
90 PERCENT EXCEEDS	8.4		8.8		7.0	

See Period of Record; partial years used in monthly statistics

a From crest-stage gage

b Apr. 3-4

c Mar. 28 to Mar. 30, 1964

d Backwater from ice

f Site and datum then in use

15274000 SOUTH FORK CAMPBELL CREEK NEAR ANCHORAGE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1948-49, 1951, 1958-61, 1965-70, 1998 to September 2001 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1998 to September 2001.

INSTRUMENTATION.--Electronic water temperature recorder since October 1998, set for 15-minute recording interval.

REMARKS.--No record from January 18-22, May 3-15, and June 27 to July 5 due to missing record and damaged equipment.

Partial day of record on January 23, May 2, and 16, June 26, and July 6. Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross sections on December 7, and August 2. No variation was found within the cross section. No variation was found between the mean stream temperature and temperature at the sensor.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 14.5°C July 4, 1999; minimum, 0.0°C on many days during the winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 13.5°C August 13, may have been higher during period of missing record; minimum, 0.0°C on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

		SAMPLE LOCA- TION, CROSS SECTION (FT FM L BANK) (00009)		SPECIFIC CONDUCT- TANCE (US/CM) (00095)		PH WATER WHOLE FIELD (STAN- DARD UNITS) (00400)		TEMPERA- TURE WATER (DEG C) (00010)		BAROMET- RIC PRES- SURE (MM OF HG) (00025)		OXYGEN, DIS- SOLVED OXYGEN, DIS- SOLVED (MG/L) (00300)		OXYGEN, DIS- SOLVED (PERCENT SATURA- TION) (00301)	
DATE	TIME														
DEC															
07...	1245		4.00		89		7.5		0		765		14.6		99.5
07...	1246		7.00		90		7.5		0		765		14.6		99.5
07...	1247		10.0		90		7.5		0		765		14.6		99.5
07...	1248		13.0		90		7.5		0		765		14.6		99.5
07...	1249		16.0		90		7.5		0		765		14.6		99.5
AUG															
02...	1120		7.00		78		7.7		9.5		756		11.6		102
02...	1121		12.0		78		7.7		9.5		756		11.6		102
02...	1122		17.0		78		7.7		9.5		756		11.6		102
02...	1123		22.0		78		7.7		9.5		756		11.6		102
02...	1124		27.0		78		7.7		9.5		756		11.6		102
				STREAM		GAGE		DIS- CHARGE, INST. CUBIC		SAMPLER		PURPOSE		QUALITY	
				WIDTH		HEIGHT		FEET		PLING		SITE		ASSUR- ANCE	
				(FT)		(FEET)		PER		METHOD,		VISIT		DATA	
				(00004)		(00065)		SECOND		CODES		(CODE)		DUCT-	
				(00004)		(00065)		(00061)		(82398)		(84164)		(50280)	
				(00004)		(00065)		(00061)		(82398)		(84164)		(50280)	
DATE	TIME	MEDIUM CODE	SAMPLE TYPE	WIDTH (FT) (00004)	HEIGHT (FEET) (00065)	PER SECOND (00061)	METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	VISIT (CODE) (50280)	SITE (CODE) (99111)	INDICA- TOR CODE (00095)	CON- DUCT- ANCE (US/CM) (00400)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPERA- TURE AIR (DEG C) (00020)	
OCT															
05...	1520	9	9	29.5	--	53	10	3045	1001	--	79	7.8	4.5		
NOV															
03...	1240	9	9	--	--	E28	10	3045	1001	--	93	7.8	-1.0		
DEC															
07...	1300	9	7	14.8	--	21	10	3045	1001	30	90	7.5	--		
JAN															
18...	1410	9	9	28.0	5.28	12	10	3045	1001	--	98	8.2	--		
FEB															
09...	1340	9	9	10.0	--	8.6	10	3045	1001	--	96	7.5	-6.5		
MAR															
02...	1050	9	9	30.0	--	11	10	3045	1001	10	108	7.7	-1.0		
MAY															
02...	1320	9	9	23.5	5.01	9.9	10	3045	1001	--	110	8.2	.00		
31...	1640	9	9	31.0	5.65	67	10	3045	1099	--	69	7.7	19.0		
JUN															
04...	1410	9	9	30.0	5.94	115	10	3045	1099	--	56	7.6	19.0		
14...	1410	9	9	30.0	5.84	93	10	3045	1001	--	62	7.6	18.0		
JUL															
19...	1320	9	9	29.5	5.76	70	10	3045	1001	--	69	7.6	16.0		
AUG															
02...	1140	9	9	25.3	5.68	53	10	3045	1001	--	78	7.7	18.0		
SEP															
09...	1320	D	9	--	--	--	--	--	1099	--	76	7.9	9.0		
11...	1200	9	9	24.9	5.64	48	10	3045	1001	--	80	7.7	15.5		

15274000 SOUTH FORK CAMPBELL CREEK NEAR ANCHORAGE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TEMP- ERATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MMOF HG) (00025)	OXYGEN DIS- OLVED (MG/L) (00300)	OXYGEN, DIS- OLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E COLI, MTEC MF WATER (COL/ 100ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	HARD- NESS TOTAL (MG/L CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM DIS- SOLVED (MG/L AS NA) (00930)	ANC WATER UNFLTRD FET FIELD CACO3 (00410)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
OCT 05...	3.0	746	12.9	98	40	--	E1	39	12.6	1.72	1.0	25	.24
NOV 03...	.00	752	14.5	101	E12	E11	<1	43	14.0	2.07	1.4	29	.19
DEC 07...	.00	765	14.6	99	E10	E7	<1	41	13.1	1.99	1.2	29	.20
JAN 18...	.5	738	13.3	95	E6	E7	<1	43	13.6	2.15	1.3	31	.22
FEB 09...	.00	763	15.0	102	E2	E1	<1	36	11.4	1.81	1.1	34	E.18
MAR 02...	.5	--	--	--	E4	<1	<1	45	14.2	2.40	1.4	34	.21
MAY 02...	2.0	742	12.9	96	--	--	--	50	16.0	2.56	1.5	39	.24
31...	7.7	753	11.3	96	--	--	--	31	9.93	1.43	1.0	22	.23
JUN 04...	6.5	753	12.3	101	--	--	--	25	8.15	1.09	.3	18	.23
14...	7.5	761	11.7	98	--	--	--	29	9.31	1.28	.9	20	.17
JUL 19...	11.0	758	10.8	98	--	--	--	31	10.3	1.34	.9	22	.09
AUG 02...	9.5	756	11.6	102	--	--	--	34	11.1	1.49	.9	24	.15
SEP 09...	6.0	766	12.4	99	--	--	--	--	--	--	--	--	--
11...	5.0	765	11.7	91	--	--	--	39	12.9	1.69	1.1	25	.13
DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SUL- FATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLOU- RIDE DIS- SOLVED (MG/L AS F) (00950)	SIL- ICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOL- IDS, RISI- DUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOL- IDS, SUM OF CON- STITU- ENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMO- NIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMO- NIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMO- NIA + ORGANIC DIS. (MG/L AS N) (00623)
OCT 05...	28	23	13.6	.5	<.2	6.1	57	50	<.001	.183	.005	E.06	<.10
NOV 03...	34	28	13.5	.5	<.2	7.6	55	57	<.001	.271	<.002	.10	<.10
DEC 07...	32	27	12.4	.5	<.2	7.2	57	54	<.001	.302	<.002	E.07	<.10
JAN 18...	36	30	12.4	.5	<.2	7.5	63	57	<.001	.340	.002	<.08	<.10
FEB 09...	41	34	12.6	.5	<.2	6.3	62	--	<.001	.366	.003	E.05	<.10
MAR 02...	40	33	12.8	.5	<.2	7.6	58	60	<.001	.368	.009	<.08	<.10
MAY 02...	45	38	10.9	.6	<.2	7.8	75	66	.001	.867	.005	<.08	<.10
31...	25	21	7.9	.4	<.2	6.0	69	41	.001	.337	.002	.14	E.07
JUN 04...	21	17	6.5	.4	<.2	5.0	47	33	<.001	.224	.005	.09	<.10
14...	22	18	8.6	.4	<.2	5.5	40	37	<.001	.144	.003	.13	E.06
JUL 19...	25	21	10.5	.3	<.2	5.0	46	41	<.001	.074	.004	E.07	<.10
AUG 02...	28	23	11.5	.2	<.2	5.3	50	45	.001	.072	<.002	E.04	<.10
SEP 09...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	29	24	12.7	.4	<.2	6.1	51	50	.001	.113	.004	E.04	<.10

15274000 SOUTH FORK CAMPBELL CREEK NEAR ANCHORAGE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CAR- BON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CAR- BON, INOR- GANIC, PAR- TIC. TOTAL (MG/L AS C) (00688)	CAR- BON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	CAR- BON, INORG + ORGANIC PAR- TIC. TOTAL (MG/L AS C) (00694)	NITRO- GEN, PARTIC- ULATE SUSP (MG/L AS N) (49570)	CHLOR-A PERIPH- YTON CHROMO- FLUO- ROM (MG/M2) (70957)	PERIPH- YTON BIO- MASS TOTAL DRY WEIGHT (00572)	PERIPH- YTON BIO- MASS TOTAL DRY WEIGHT (00573)
OCT 05...	E.002	<.006	.002	<10	<2.2	.79	<.1	.1	.1	<.022	--	--	--
NOV 03...	<.004	<.006	<.007	M	E2.5	.61	<.1	<.1	<.1	<.022	--	--	--
DEC 07...	E.003	<.006	<.007	<10	<3.2	.63	<.1	<.1	<.1	.057	--	--	--
JAN 18...	E.003	E.004	<.007	M	<3.2	.50	<.1	.2	.2	<.022	--	--	--
FEB 09...	E.003	<.006	E.004	<10	<3.2	.54	<.1	<.1	<.1	<.022	--	--	--
MAR 02...	E.002	E.003	<.007	<10	<3.2	.46	<.1	.1	.1	<.022	--	--	--
MAY 02...	.004	<.006	<.007	<10	<3.2	1.2	--	--	E.1	<.022	--	--	--
31...	.016	E.004	<.007	<10	<3.0	1.7	--	--	1.5	.110	--	--	--
JUN 04...	.022	<.006	<.007	<10	<3.0	1.4	--	--	5.9	.404	--	--	--
14...	.006	<.006	<.007	<10	<3.0	.97	--	--	.4	<.022	--	--	--
JUL 19...	.006	<.006	<.007	<10	<3.0	.76	--	--	.4	.049	--	--	--
AUG 02...	E.002	<.006	<.007	<10	<3.0	.61	--	--	.6	.079	--	--	--
SEP 09...	--	--	--	--	--	--	--	--	--	--	3.0	38.2	40.2
11...	E.002	<.006	<.007	M	<3.0	.78	--	--	.2	<.022	--	--	--

DATE	PHEOPHY- TIN A, PERIPHY- TON (MG/ M2) (62359)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 05...	--	2	.29	--
NOV 03...	--	1	--	--
DEC 07...	--	--	--	--
JAN 18...	--	2	.06	47
FEB 09...	--	1	.02	--
MAR 02...	--	1	.03	--
MAY 02...	--	1	.03	--
31...	--	8	1.5	43
JUN 04...	--	14	4.3	20
14...	--	5	1.3	--
JUL 19...	--	3	.56	--
AUG 02...	--	3	.43	--
SEP 09...	1.6	--	--	--
11...	--	.0	.00	--

15274000 SOUTH FORK CAMPBELL CREEK NEAR ANCHORAGE--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	1.0	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
2	2.0	.0	1.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3	3.0	1.5	2.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
4	3.0	2.0	2.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
5	4.0	2.0	3.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6	4.5	3.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	4.5	3.0	3.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
8	4.0	2.0	3.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9	2.5	.5	1.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	1.5	.0	.5	2.5	.0	1.5	.0	.0	.0	.0	.0	.0
11	2.0	.5	1.5	2.0	.5	1.0	.0	.0	.0	.0	.0	.0
12	2.5	1.5	2.0	1.0	.0	.5	.0	.0	.0	.0	.0	.0
13	3.5	2.0	2.5	1.5	.0	.5	.0	.0	.0	.0	.0	.0
14	3.5	2.5	3.0	1.5	.0	1.0	.0	.0	.0	.0	.0	.0
15	3.0	1.5	2.5	.0	.0	.0	.0	.0	.0	1.0	.0	.5
16	3.5	2.0	2.5	.0	.0	.0	.0	.0	.0	.5	.0	.5
17	3.0	2.0	2.5	1.5	.0	.5	.0	.0	.0	1.0	.0	.5
18	2.5	1.5	2.0	1.5	.5	1.0	.0	.0	.0	---	---	---
19	2.5	1.0	2.0	1.5	1.0	1.5	.0	.0	.0	---	---	---
20	2.0	.0	.5	1.5	1.0	1.5	.0	.0	.0	---	---	---
21	.0	.0	.0	2.0	1.0	1.5	.0	.0	.0	---	---	---
22	1.5	.0	1.0	1.5	.0	1.0	.0	.0	.0	---	---	---
23	1.0	.0	.5	.5	.0	.5	.0	.0	.0	---	.0	---
24	2.0	.0	1.0	.0	.0	.0	.0	.0	.0	.5	.0	.0
25	2.5	1.5	2.0	.0	.0	.0	.0	.0	.0	.5	.0	.5
26	1.5	.0	.5	.0	.0	.0	.0	.0	.0	.5	.5	.5
27	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.5
28	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
29	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
30	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
31	.0	.0	.0	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	4.5	.0	1.5	2.5	.0	.4	.0	.0	.0	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.5	1.5	2.5
2	.0	.0	.0	1.0	.0	.0	1.5	.0	.5	---	.5	---
3	.0	.0	.0	.0	.0	.0	2.5	.5	1.0	---	---	---
4	.0	.0	.0	.0	.0	.0	2.0	.5	1.0	---	---	---
5	.0	.0	.0	.0	.0	.0	1.5	.0	.5	---	---	---
6	.0	.0	.0	1.0	.0	.5	1.0	.0	.5	---	---	---
7	.0	.0	.0	1.0	.5	.5	2.0	.5	1.0	---	---	---
8	.0	.0	.0	1.0	.0	.5	3.0	.5	1.5	---	---	---
9	.0	.0	.0	1.0	.5	1.0	2.5	.0	1.0	---	---	---
10	.0	.0	.0	1.5	.5	1.0	2.0	1.0	1.5	---	---	---
11	.0	.0	.0	1.5	.5	1.0	2.0	1.0	1.5	---	---	---
12	.0	.0	.0	1.5	.5	1.0	2.0	.5	1.5	---	---	---
13	.0	.0	.0	1.0	.0	.5	3.0	.5	1.5	---	---	---
14	.0	.0	.0	1.0	.5	.5	3.0	.0	1.5	---	---	---
15	.0	.0	.0	1.0	.0	1.0	3.0	1.0	1.5	---	---	---
16	.0	.0	.0	1.5	.5	1.0	3.0	.5	1.5	5.0	---	---
17	.0	.0	.0	1.0	.0	.0	3.5	.5	1.5	7.0	1.0	3.5
18	.0	.0	.0	.0	.0	.0	4.0	.5	2.0	5.5	2.5	4.0
19	.0	.0	.0	.5	.0	.0	4.0	.0	2.0	8.0	2.5	5.0
20	.0	.0	.0	.0	.0	.0	5.0	.5	2.0	6.5	2.0	4.0
21	.0	.0	.0	.0	.0	.0	4.0	.5	2.0	5.0	2.0	3.5
22	.0	.0	.0	.0	.0	.0	5.0	1.5	3.0	6.0	2.0	4.0
23	.0	.0	.0	.0	.0	.0	3.5	.5	2.0	5.5	3.0	4.0
24	.0	.0	.0	.0	.0	.0	4.5	.5	2.5	6.0	2.5	4.0
25	.0	.0	.0	.0	.0	.0	5.0	1.0	2.5	6.5	2.5	4.5
26	.0	.0	.0	.0	.0	.0	5.0	1.5	3.0	5.5	2.5	4.0
27	.0	.0	.0	.0	.0	.0	5.0	1.5	3.0	8.5	1.5	5.0
28	.0	.0	.0	.0	.0	.0	4.5	2.0	3.0	9.0	2.5	5.5
29	---	---	---	.5	.0	.0	6.5	.5	3.5	7.0	3.5	5.0
30	---	---	---	1.0	.5	.5	6.5	1.0	3.5	6.5	3.0	4.5
31	---	---	---	1.5	.0	.5	---	---	---	7.5	2.5	4.5
MONTH	.0	.0	.0	1.5	.0	.3	6.5	.0	1.8	---	---	---

15274000 SOUTH FORK CAMPBELL CREEK NEAR ANCHORAGE--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	8.0	3.0	5.0	---	---	---	11.5	9.0	10.0	8.5	6.5	7.5
2	8.5	3.0	5.5	---	---	---	12.5	9.0	10.5	9.0	7.5	8.0
3	8.0	4.0	5.5	---	---	---	11.5	9.5	10.0	10.0	8.0	9.0
4	6.5	3.0	5.0	---	---	---	11.0	9.0	10.0	9.5	7.0	8.0
5	7.0	4.0	5.0	---	---	---	11.0	8.0	9.5	7.5	6.5	7.0
6	5.5	4.5	5.0	9.5	---	---	12.5	8.0	10.0	8.0	5.5	6.5
7	7.0	3.5	5.0	10.5	7.5	9.0	12.0	9.5	11.0	7.5	6.0	7.0
8	7.5	3.5	5.5	9.5	8.0	8.5	11.5	10.0	10.5	8.0	5.0	6.5
9	10.0	4.0	6.5	11.0	7.5	9.0	11.5	9.5	10.5	8.0	4.5	6.0
10	9.5	4.5	7.0	10.0	7.5	8.5	11.5	9.5	10.5	7.5	4.5	6.0
11	7.5	5.5	6.0	9.0	7.5	8.0	12.0	9.5	10.5	7.5	4.5	5.5
12	7.0	5.0	6.0	8.5	7.0	8.0	12.5	9.5	11.0	7.0	5.5	6.5
13	7.0	5.0	6.0	9.0	7.0	8.0	13.5	9.5	11.5	7.0	5.5	6.5
14	10.0	5.0	7.0	10.0	7.5	8.5	13.0	11.0	11.5	7.0	5.5	6.5
15	10.5	5.0	8.0	9.5	8.0	8.5	12.0	10.5	11.0	7.5	5.5	6.5
16	11.0	5.5	8.0	9.5	8.0	8.5	11.5	10.5	11.0	7.5	5.0	6.5
17	11.0	6.0	8.5	11.0	8.0	9.5	11.5	10.0	11.0	8.5	6.5	7.5
18	9.5	6.5	8.0	12.0	8.0	10.0	11.5	9.5	10.5	8.0	7.5	7.5
19	10.0	6.0	8.0	11.5	10.0	11.0	11.0	9.5	10.0	8.0	7.0	7.5
20	11.0	7.0	8.5	11.5	10.0	10.5	11.0	8.5	9.5	8.0	6.5	7.0
21	10.0	7.5	8.5	10.5	9.0	10.0	12.0	8.5	10.0	7.0	4.5	5.5
22	11.5	6.5	9.0	10.5	9.0	10.0	11.5	8.5	10.0	6.5	4.0	5.0
23	12.5	7.5	10.0	10.0	9.0	9.5	11.0	8.5	9.5	6.0	5.0	5.5
24	11.0	8.5	9.0	10.0	8.5	9.0	10.0	9.0	9.5	6.0	4.5	5.5
25	11.5	7.0	9.0	10.0	8.5	9.5	10.5	8.0	9.5	6.0	4.0	5.0
26	---	8.5	---	11.5	9.0	10.0	10.5	8.0	9.5	5.5	4.0	5.0
27	---	---	---	12.0	9.5	10.5	10.0	7.5	9.0	5.0	2.5	4.0
28	---	---	---	11.5	8.5	10.5	10.0	8.5	9.0	5.5	4.0	5.0
29	---	---	---	12.0	9.0	10.5	8.5	7.5	8.0	5.0	3.5	4.5
30	---	---	---	11.0	9.5	10.0	9.0	7.5	8.0	5.0	2.5	4.0
31	---	---	---	11.0	8.5	9.5	8.5	6.5	7.5	---	---	---
MONTH	---	---	---	---	---	---	13.5	6.5	10.0	10.0	2.5	6.3

15275100 CHESTER CREEK AT ARCTIC BOULEVARD AT ANCHORAGE

LOCATION.--Lat 61°12'19", long 149°53'43", on line between sec. 19, R. 3 W., and sec. 24, R. 4 W., T. 13 N. (Anchorage A-8 quad), Hydrologic Unit 19020401, on left bank 50 ft downstream from bridge on Arctic Boulevard in Anchorage and 0.8 mi upstream from mouth.

DRAINAGE AREA.--27.4 mi².

WATER-DISCHARGE RECORD

PERIOD OF RECORD.--June 1966 to April 1986, July 1987 to September 1993, and October 1998 to current year.

REVISED RECORDS.--WRD Alaska 1972, WRD AK-00-1: Drainage area. WDR AK-82-1: 1979(M), 1981(M).

GAGE.--Water-stage-recorder. Auxiliary crest-stage gage since April 2000. Datum of gage is 16.02 ft above sea level (from USGS&CG, datum of 1968). Prior to May 25, 1988, at site 100 ft upstream at same datum.

REMARKS.--Records good, except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	23	e17	e16	13	12	18	19	21	19	22	19
2	27	22	e16	e16	e13	12	15	21	22	19	22	24
3	27	22	e16	e16	e13	e12	37	28	21	19	31	32
4	27	21	e16	16	e12	e12	49	24	22	32	32	29
5	29	21	e16	e15	e12	e12	28	20	22	70	24	32
6	31	22	e17	e15	e12	12	23	20	25	51	22	23
7	28	22	21	e16	12	14	25	20	22	31	22	22
8	27	21	19	e16	e13	13	39	22	22	36	22	23
9	25	e21	18	e16	e13	16	37	23	22	29	22	21
10	24	e22	18	16	e12	22	30	21	22	27	21	20
11	25	e30	18	e16	12	21	33	20	23	28	21	20
12	24	26	18	e15	13	37	28	20	25	24	20	20
13	23	23	17	15	e12	28	23	20	22	25	20	20
14	24	22	e17	15	e12	18	23	19	21	26	21	21
15	24	21	e16	22	e12	16	23	19	21	24	20	20
16	23	20	e17	17	e12	17	23	24	20	24	21	20
17	24	20	e17	15	e12	18	21	21	21	25	22	21
18	23	21	e17	21	e12	17	21	20	21	23	29	21
19	24	20	17	e25	e12	e16	21	20	20	25	22	22
20	26	20	18	17	e12	e15	21	19	21	35	23	21
21	25	20	20	15	12	e15	21	20	21	27	21	20
22	26	20	e16	14	12	e14	21	19	20	35	21	19
23	28	19	e16	15	e12	e14	21	19	20	25	20	19
24	24	19	e16	14	e11	e15	20	19	20	24	21	19
25	25	18	18	14	e12	e15	20	19	22	25	21	19
26	24	e18	16	13	e12	15	20	18	21	24	20	19
27	22	17	16	14	16	25	20	18	20	23	20	18
28	20	17	16	13	14	29	20	18	19	22	20	18
29	21	22	16	e13	---	22	20	20	20	21	20	18
30	21	19	17	e13	---	16	19	21	19	24	20	17
31	23	---	16	13	---	16	---	20	---	23	20	---
TOTAL	772	629	529	487	347	536	740	631	638	865	683	637
MEAN	24.9	21.0	17.1	15.7	12.4	17.3	24.7	20.4	21.3	27.9	22.0	21.2
MAX	31	30	21	25	16	37	49	28	25	70	32	32
MIN	20	17	16	13	11	12	15	18	19	19	20	17
AC-FT	1530	1250	1050	966	688	1060	1470	1250	1270	1720	1350	1260
CFSM	.91	.77	.62	.57	.45	.63	.90	.74	.78	1.02	.81	.78
IN.	1.05	.86	.72	.66	.47	.73	1.01	.86	.87	1.18	.93	.87

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2001, BY WATER YEAR (WY)#

	MEAN	25.8	18.4	14.7	12.7	11.5	13.5	25.1	23.3	21.8	22.2	25.2	28.2
MAX	52.5	45.5	33.1	26.5	20.1	25.2	58.4	55.9	44.9	34.7	61.4	59.7	59.7
(WY)	1990	1990	1990	1990	1990	1990	1990	1992	1990	2000	1989	1989	1989
MIN	10.7	8.27	3.84	3.27	2.99	4.18	10.6	11.0	10.1	10.1	9.59	12.5	12.5
(WY)	1971	1993	1993	1971	1971	1971	1970	1970	1970	1976	1976	1970	1970

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1966 - 2001#
ANNUAL TOTAL	9192	7494	
ANNUAL MEAN	25.1	20.5	20.2
HIGHEST ANNUAL MEAN			38.4
LOWEST ANNUAL MEAN			11.5
HIGHEST DAILY MEAN	80	Sep 26	345
LOWEST DAILY MEAN	a13	Jan 1	b1.6
ANNUAL SEVEN-DAY MINIMUM	13	Jan 1	1.9
MAXIMUM PEAK FLOW		116	421
MAXIMUM PEAK STAGE		2.97	5.56
ANNUAL RUNOFF (AC-FT)	18230	14860	14660
ANNUAL RUNOFF (CFSM)	.92	.75	.74
ANNUAL RUNOFF (INCHES)	12.50	10.19	10.05
10 PERCENT EXCEEDS	35	27	33
50 PERCENT EXCEEDS	25	20	18
90 PERCENT EXCEEDS	16	13	9.5

See Period of Record; partial years used in monthly statistics

a Jan. 1 to 14

b Feb. 12 to Feb. 14, 1975

e Estimated

15275100 CHESTER CREEK AT ARCTIC BOULEVARD AT ANCHORAGE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967-73, 1975-1977, 1980 to 1986, and 1998 to September 2001 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1981 to March 1986, June 2000 to September 2001.

WATER TEMPERATURE: October 1981 to March 1986, October 1998 to September 2001.

INSTRUMENTATION.--Electronic water-temperature and specific conductance recorder set for 15-minute recording interval.

REMARKS.--

WATER TEMPERATURE: Partial record December 5, 6, and January 8. Record represents water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with stream average by cross sections on November 2, March 1, and July 5. No variation was found within the cross sections. No variation was found between mean stream temperature and sensor temperature.

SPECIFIC CONDUCTANCE: Partial record December 5, 6, and January 8. Records represent specific conductance at the sensor within 5%. Record for February 18 to March 1, March 7 to April 10, May 1 to May 17, and July 3 to August 1 are during periods of probe fouling. During the periods of probe fouling the record represents specific conductance at the sensor within 10 to 20%.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 19.5°C, July 6, 1985; minimum, 0.0°C, on many days during winter periods.

SPECIFIC CONDUCTANCE: Maximum, 1390 µS/cm, February 8, 1986; minimum, 48 µS/cm August 14, 1983.

EXTREMES FOR CURRENT PERIOD.--

WATER TEMPERATURE: Maximum, 16.5°C, June 26-29; minimum, 0.0°C on many days during winter.

SPECIFIC CONDUCTANCE: Maximum, 1240 µS/cm, January 18; minimum, 63 µS/cm, July 5.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
NOV								
02...	1450	2.00	254	8.1	2.5	752	14.3	106
02...	1451	6.00	255	8.1	2.5	752	14.2	106
02...	1452	10.0	255	8.1	2.5	752	14.2	106
02...	1453	14.0	255	8.1	2.5	752	14.1	105
02...	1454	18.0	255	8.1	2.5	752	14.1	105
MAR								
01...	1100	5.00	272	8.0	0	752	14.4	99.9
01...	1101	9.00	272	8.0	0	752	14.5	101
01...	1102	14.0	273	8.0	0	752	14.5	101
01...	1103	19.0	273	8.1	0	752	14.5	101
JUL								
05...	1035	19.0	120	7.1	13.0	756	9.2	88.0
05...	1036	13.0	120	7.1	13.0	756	9.2	88.0
05...	1037	7.00	119	7.1	13.0	756	9.2	88.0
05...	1038	1.00	118	7.1	13.0	756	9.2	88.0

15275100 CHESTER CREEK AT ARCTIC BOULEVARD AT ANCHORAGE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	MEDIUM CODE	SAMPLE TYPE	STREAM WIDTH (FT) (00004)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM- PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	PURPOSE SITE VISIT (CODE) (50280)	QUALITY ASSUR- ANCE DATA INDICA- TOR CODE (99111)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD (00400)	TEMPERA- TURE AIR (DEG C) (00020)
OCT													
05...	1210	9	9	18.2	1.84	26	10	3045	1001	--	245	7.8	6.0
NOV													
02...	1440	9	9	18.0	1.72	22	10	3045	1001	--	255	8.1	-1.0
16...	1300	9	9	15.0	1.67	19	70	8010	1099	--	267	7.8	.00
16...	1700	9	9	15.0	1.68	19	70	8010	1099	--	266	7.8	.00
17...	1130	9	9	15.0	1.68	19	70	8010	1099	--	266	7.7	-1.0
17...	1440	9	9	15.0	1.71	20	70	8010	1099	--	264	7.9	-1.5
DEC													
05...	1340	9	9	18.0	1.61	16	10	3045	1001	10	267	7.5	1.0
JAN													
16...	1240	9	9	19.0	1.62	17	10	3045	1001	--	305	7.8	--
FEB													
08...	1400	9	9	18.0	1.98	14	10	3045	1001	--	275	7.8	-2.5
MAR													
01...	1000	9	9	17.7	1.59	13	10	3045	1001	--	272	8.0	-1.0
APR													
14...	2100	9	9	17.0	1.79	25	10	3045	1001	--	288	7.9	10.5
MAY													
01...	1520	9	9	18.0	1.70	20	10	3045	1001	--	289	8.2	7.5
04...	1930	9	9	18.5	1.76	23	10	3045	1001	--	268	7.9	1.5
JUN													
12...	1150	9	9	18.5	1.79	25	10	3045	1001	--	242	7.8	15.0
JUL													
03...	1330	9	9	18.0	1.69	17	10	3045	1001	--	257	8.0	17.0
05...	1050	9	9	22.0	2.58	83	10	3045	1001	--	119	7.1	18.5
AUG													
01...	1200	9	9	18.7	1.70	24	10	3045	1001	--	259	7.8	17.5
SEP													
06...	1010	D	9	--	1.69	21	8010	8010	1099	--	239	7.9	22.0
10...	1200	9	9	17.8	1.65	18	10	3045	1001	--	257	7.8	12.5

15275100 CHESTER CREEK AT ARCTIC BOULEVARD AT ANCHORAGE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TEMP- ERATURE (DEG C) (00010)	BARO- METRIC PRES- SURE (MMOF HG) (00025)	OXYGEN DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E COLI, MTEC MF WATER (COL/ 100 ML) (31649)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM DIS- SOLVED (MG/L AS NA) (00930)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
OCT													
05...	5.0	754	11.8	93	390	240	360	110	32.7	7.27	6.3	77	1.13
NOV													
02...	2.5	752	14.2	106	1100	E1500	130	110	32.7	7.29	7.1	81	.88
16...	2.5	751	13.4	100	3500	1700	1300	--	--	--	--	--	--
16...	2.5	751	12.9	96	84	80	560	--	--	--	--	--	--
17...	2.1	751	13.0	96	88	78	850	--	--	--	--	--	--
17...	2.5	751	12.9	96	3900	2700	220	--	--	--	--	--	--
DEC													
05...	2.0	747	13.5	100	77	83	E45	120	35.4	7.92	8.4	85	.88
JAN													
16...	.5	766	13.7	95	87	80	110	110	31.6	7.93	14.0	83	2.83
FEB													
08...	.00	767	14.6	99	27	25	180	120	34.6	7.84	8.2	85	1.18
MAR													
01...	.00	752	14.5	101	120	86	48	110	30.6	7.76	9.3	82	1.29
APR													
14...	5.5	769	12.3	97	--	--	--	100	30.0	7.28	10.7	73	3.40
MAY													
01...	6.5	757	12.3	101	--	--	--	120	34.2	8.06	9.1	78	1.32
04...	5.0	755	12.2	96	--	--	--	100	29.1	7.20	9.9	73	1.86
JUN													
12...	11.5	766	11.1	101	--	--	--	110	30.5	7.23	7.3	71	1.18
JUL													
03...	13.5	768	10.4	99	--	--	--	110	32.8	7.95	7.3	83	.91
05...	13.0	756	9.2	88	--	--	--	48	14.0	3.07	4.3	37	1.31
AUG													
01...	13.0	765	10.7	101	--	--	--	110	31.6	7.63	6.9	83	.92
SEP													
06...	9.5	760	11.3	99	--	--	--	--	--	--	--	--	--
10...	9.0	767	12.3	106	--	--	--	110	32.9	7.59	7.6	74	1.03

15275100 CHESTER CREEK AT ARCTIC BOULEVARD AT ANCHORAGE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	BICARBO NATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT FIELD MG/S AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLOU- RIDE DIS- SOLVED (MG/L AS F) (00950)	SIL- ICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOL- IDS, RISI- DUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOL- IDS, SUM OF CON- STITU- ENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMO- NIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMO- NIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMO- NIA + ORGANIC DIS. (MG/L AS N) (00623)
OCT													
05...	91	76	22.5	13.0	<.2	11.8	155	143	.007	.686	.037	.28	.17
NOV													
02...	98	80	22.8	14.6	E.1	11.9	160	149	.003	.759	.010	.16	E.07
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
05...	104	85	22.8	13.9	E.1	13.1	167	158	.007	.853	.045	.23	.11
JAN													
16...	98	82	22.0	29.9	E.1	12.0	179	172	.011	.832	.062	<.08	.18
FEB													
08...	104	85	23.0	17.2	E.1	12.3	161	159	.003	.872	.030	.19	E.08
MAR													
01...	99	82	21.7	19.4	E.1	11.1	160	153	.004	.776	.023	.11	E.09
APR													
14...	88	72	19.9	25.9	<.2	8.8	182	152	.010	.550	.094	.68	.36
MAY													
01...	91	76	23.4	21.5	E.1	9.2	167	154	.004	.495	.009	.32	.17
04...	88	72	19.8	23.9	<.2	8.0	166	146	.009	.497	.030	.40	.20
JUN													
12...	85	71	19.3	14.5	E.1	10.6	148	135	.006	.455	.009	.34	.21
JUL													
03...	98	82	17.8	13.7	E.1	11.7	168	142	.005	.430	.010	.27	.14
05...	43	36	8.7	7.0	<.2	5.4	83	66	.007	.163	.003	.83	.23
AUG													
01...	100	82	18.7	14.2	<.2	10.6	159	142	.005	.477	<.002	.17	.13
SEP													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	91	76	19.9	14.7	E.1	10.9	143	142	.007	.608	.004	.20	.13

15275100 CHESTER CREEK AT ARCTIC BOULEVARD AT ANCHORAGE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO-DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CAR-BON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CAR-BON, INORGANIC, PAR-TIC-TIC. TOTAL (MG/L AS C) (00688)	CAR-BON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	CAR-BON, INORG + ORGANIC TIC. TOTAL (MG/L AS C) (00694)	NITRO-GEN, PARTIC-ULATE WAT FLT SUSP (MG/L AS N) (49570)	CHLOR-A PERIPH-YTON CHROMO-GRAPHIC FLUO-ROM (MG/M2) (70957)	PERIPH-YTON BIO-MASS ASH WEIGHT G/SQ M (00572)	PERIPH-YTON BIO-MASS TOTAL DRY WEIGHT G/SQ M (00573)
OCT 05...	.026	E.003	.002	90	81.0	3.6	<.1	.7	.7	.068	--	--	--
NOV 02...	.016	<.006	E.004	120	80.3	1.9	<.1	.9	.9	.067	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 05...	.019	.007	<.007	100	103	1.6	<.1	1.1	1.1	.085	--	--	--
JAN 16...	.025	E.005	<.007	100	100	1.7	<.1	.5	.5	.034	--	--	--
FEB 08...	.031	E.003	<.007	80	70.7	1.5	<.1	1.0	1.0	.077	--	--	--
MAR 01...	.017	<.006	<.007	80	87.4	1.6	<.1	1.2	1.2	.061	--	--	--
APR 14...	.106	.027	.013	250	215	4.0	--	--	1.5	.203	--	--	--
MAY 01...	<.060	<.060	<.007	230	111	3.1	--	--	.7	.077	--	--	--
04...	.054	.006	<.007	210	134	3.4	--	--	E2.4	.147	--	--	--
JUN 12...	.031	.007	<.007	130	62.1	4.4	--	--	1.3	.125	--	--	--
JUL 03...	.025	.010	E.004	100	44.0	2.4	--	--	E1.2	.080	--	--	--
05...	.131	.015	<.007	70	52.5	4.3	--	--	E5.1	.338	--	--	--
AUG 01...	.014	E.005	<.007	100	40.2	2.1	--	--	.6	.061	--	--	--
SEP 06...	--	--	--	--	--	--	--	--	--	--	35.1	53.5	62.1
10...	.021	E.004	<.007	110	59.0	2.4	--	--	.6	.053	--	--	--

DATE	PHEO-PHYTIN A, PERI-PHYTON (MG/M2) (62359)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 05...	--	7	.49	94
NOV 02...	--	9	.53	92
16...	--	--	--	--
16...	--	--	--	--
17...	--	--	--	--
17...	--	--	--	--
DEC 05...	--	10	.43	--
JAN 16...	--	10	.46	93
FEB 08...	--	12	.44	84
MAR 01...	--	10	.36	89
APR 14...	--	12	.81	89
MAY 01...	--	7	.37	96
04...	--	22	1.4	96
JUN 12...	--	11	.74	96
JUL 03...	--	.0	.00	--
05...	--	.0	.00	--
AUG 01...	--	2	.13	--
SEP 06...	10	--	--	--
10...	--	4	.19	--

15275100 CHESTER CREEK AT ARCTIC BOULEVARD AT ANCHORAGE--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	6.0	4.0	5.0	3.0	1.5	2.0	1.0	.0	.0	1.5	.0	.5
2	5.5	4.0	5.0	2.5	1.5	2.0	.0	.0	.0	.0	.0	.0
3	6.0	5.0	5.5	2.0	1.0	1.5	.0	.0	.0	1.0	.0	.5
4	6.0	5.0	5.5	2.0	1.0	1.5	1.0	.0	.5	1.0	.0	.5
5	6.0	5.5	5.5	2.5	2.0	2.0	---	1.0	---	.0	.0	.0
6	6.5	5.0	5.5	2.0	1.5	2.0	2.0	---	---	.0	.0	.0
7	6.5	5.0	5.5	2.0	1.0	1.5	2.5	2.0	2.5	2.0	.0	1.0
8	6.0	4.5	5.5	2.0	.5	1.5	2.5	2.0	2.0	---	1.0	---
9	5.5	4.0	4.5	3.0	2.0	2.5	2.0	1.0	1.5	1.5	1.0	1.5
10	4.5	3.5	4.0	3.5	2.5	3.0	1.5	.5	1.0	1.0	.0	.5
11	5.0	3.5	4.5	3.5	1.5	2.0	2.0	1.0	2.0	.0	.0	.0
12	5.0	4.0	4.5	3.0	2.0	2.5	2.0	1.0	1.5	1.5	.0	1.0
13	5.5	4.5	5.0	3.0	2.5	2.5	1.0	.0	.5	1.5	1.0	1.5
14	5.5	4.5	5.0	3.0	2.0	3.0	.0	.0	.0	2.0	1.5	2.0
15	5.5	4.0	5.0	2.0	1.0	1.5	.0	.0	.0	2.5	1.5	2.0
16	5.5	4.0	5.0	2.5	2.0	2.0	.0	.0	.0	1.5	.5	1.0
17	5.5	4.5	5.0	3.0	1.5	2.5	.0	.0	.0	1.5	1.0	1.5
18	5.0	4.0	4.5	3.0	2.0	2.5	1.0	.0	.0	2.5	1.0	2.0
19	5.0	4.0	4.5	3.0	3.0	3.0	1.5	1.0	1.0	1.5	1.0	1.5
20	4.0	2.5	3.5	3.0	2.5	3.0	2.0	.0	1.0	2.0	1.5	2.0
21	4.0	2.0	3.0	3.0	2.0	2.5	2.0	.0	1.0	2.0	1.0	1.5
22	4.5	3.5	4.0	2.5	2.0	2.5	.0	.0	.0	2.5	1.5	2.0
23	4.0	3.0	3.5	2.0	1.5	2.0	.0	.0	.0	2.5	1.5	2.0
24	4.5	3.0	3.5	2.0	1.5	2.0	.5	.0	.0	1.5	1.5	1.5
25	4.5	4.0	4.0	2.0	.5	1.0	1.0	.5	.5	1.5	1.5	1.5
26	4.0	2.5	3.0	1.0	.0	.5	1.0	.5	.5	2.0	1.5	2.0
27	3.0	1.5	2.0	1.5	1.0	1.5	1.0	.0	.5	2.5	1.0	2.0
28	3.0	1.0	2.0	2.5	1.0	1.5	1.0	.0	1.0	1.0	.5	.5
29	2.5	1.5	2.0	2.5	2.0	2.5	2.0	1.0	1.5	.5	.0	.0
30	3.0	2.5	3.0	2.0	1.0	1.5	2.0	1.5	1.5	.5	.0	.5
31	4.0	3.0	3.5	---	---	---	1.5	1.0	1.5	1.5	.5	1.0
MONTH	6.5	1.0	4.2	3.5	.0	2.0	---	---	---	---	.0	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1.5	.0	.5	2.0	.0	1.0	3.5	.0	1.5	6.5	4.5	5.5
2	.5	.0	.0	2.0	.0	1.0	4.5	1.0	2.5	5.0	3.5	4.5
3	.5	.0	.0	.0	.0	.0	3.0	.5	2.5	4.5	2.5	3.5
4	.0	.0	.0	.0	.0	.0	3.5	.5	2.0	5.0	3.0	4.0
5	.0	.0	.0	2.0	.0	1.0	4.5	1.0	2.0	6.0	3.0	4.5
6	1.0	.0	.5	2.0	.5	1.5	3.5	1.0	2.0	6.0	4.0	5.0
7	1.5	.5	1.0	3.0	1.5	2.0	5.0	2.0	3.0	8.5	3.5	6.0
8	.5	.0	.0	2.5	1.0	2.0	5.0	1.5	3.0	9.0	5.0	6.5
9	.0	.0	.0	3.0	1.5	2.0	4.5	1.5	2.5	8.5	5.0	6.5
10	.5	.0	.5	3.0	1.5	2.0	4.0	2.5	3.0	8.0	5.5	6.5
11	.5	.5	.5	3.0	1.5	2.5	5.5	2.5	3.5	10.5	5.0	7.0
12	1.0	.0	.5	2.5	1.0	2.0	4.0	2.5	3.0	11.0	5.0	8.0
13	1.0	.0	.0	3.0	1.0	1.5	5.0	2.5	3.5	12.0	5.5	8.5
14	.0	.0	.0	3.0	1.5	2.0	6.0	2.0	4.0	12.5	6.5	9.5
15	.0	.0	.0	3.0	1.5	2.0	5.5	3.0	4.0	11.0	8.0	9.5
16	.5	.0	.0	3.5	1.5	2.5	5.5	2.5	4.0	10.0	8.0	9.0
17	.5	.0	.0	3.5	.5	1.5	6.5	2.5	4.0	11.5	6.5	9.0
18	.0	.0	.0	1.5	.0	.5	6.5	3.0	4.5	11.0	8.0	9.5
19	.0	.0	.0	.0	.0	.0	7.5	2.5	4.5	13.0	7.5	9.5
20	2.0	.0	1.5	.0	.0	.0	7.5	2.5	5.0	12.0	7.5	9.5
21	2.5	1.5	2.0	.0	.0	.0	7.0	3.0	5.0	10.5	8.0	9.0
22	2.0	.0	1.5	.0	.0	.0	8.0	4.0	5.5	11.0	7.5	9.0
23	.0	.0	.0	.0	.0	.0	7.0	3.0	5.0	11.5	8.0	9.5
24	.0	.0	.0	.0	.0	.0	8.0	3.0	5.5	9.5	7.5	8.5
25	.0	.0	.0	2.0	.0	1.0	7.0	4.5	5.5	10.0	7.5	8.5
26	2.0	.0	.5	3.0	1.0	2.0	8.0	4.0	6.0	11.5	7.5	9.5
27	2.5	1.5	2.0	3.5	1.0	2.0	7.5	4.0	5.5	13.5	7.0	10.0
28	2.0	1.0	1.5	3.5	1.0	2.0	7.5	4.5	6.0	14.0	8.5	11.0
29	---	---	---	2.5	1.0	1.5	9.5	3.5	6.0	14.0	9.5	11.5
30	---	---	---	2.5	1.0	2.0	9.5	4.0	6.5	13.5	10.0	11.5
31	---	---	---	4.0	1.0	2.0	---	---	---	13.5	9.0	11.5
MONTH	2.5	.0	.4	4.0	.0	1.3	9.5	.0	4.0	14.0	2.5	8.1

15275100 CHESTER CREEK AT ARCTIC BOULEVARD AT ANCHORAGE--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	15.0	10.0	12.0	15.0	12.0	13.0	14.5	12.0	13.0	12.0	9.5	10.5
2	14.5	10.5	12.5	15.5	11.5	13.5	15.0	12.0	13.5	12.5	10.5	11.5
3	14.0	11.0	12.5	14.0	12.5	13.0	15.0	12.0	13.0	12.5	11.5	12.0
4	13.5	10.5	12.0	14.5	13.0	13.5	13.5	12.5	13.0	12.0	11.0	11.5
5	13.0	11.0	12.0	14.0	13.0	13.5	14.5	11.5	12.5	11.5	10.0	11.0
6	12.0	10.5	11.0	14.0	12.5	13.0	14.5	11.0	13.0	11.5	9.5	10.0
7	13.0	10.0	11.5	13.5	12.0	12.5	14.5	12.0	13.0	11.5	9.5	10.5
8	13.5	9.0	11.5	15.0	12.0	13.0	13.5	12.5	13.0	11.5	8.5	10.0
9	14.5	9.5	11.5	14.0	12.0	13.0	13.5	12.5	13.0	11.5	8.0	9.5
10	14.5	10.0	12.0	14.0	11.5	12.5	13.5	12.0	13.0	11.0	7.5	9.5
11	12.5	11.0	11.5	12.5	11.5	12.0	15.0	12.0	13.0	10.5	7.5	9.0
12	12.0	11.0	11.5	12.5	11.0	11.5	15.0	12.0	13.5	10.0	9.0	9.5
13	13.5	10.5	11.5	13.0	11.0	12.0	15.5	11.5	13.5	10.0	8.5	9.5
14	14.5	10.0	12.0	14.5	11.0	12.5	14.0	13.0	13.5	10.5	9.0	9.5
15	15.5	10.5	13.0	13.0	12.0	12.5	13.5	12.0	13.0	10.5	8.0	9.5
16	16.0	11.0	13.5	13.5	11.0	12.5	13.5	12.0	12.5	10.0	7.5	9.0
17	15.0	11.5	13.0	14.0	11.5	12.5	14.0	12.0	13.0	11.0	9.0	10.0
18	14.0	11.5	12.5	15.0	11.5	13.0	14.0	13.0	13.5	10.5	9.5	10.0
19	15.0	11.0	13.0	14.0	12.5	13.0	13.0	12.0	12.5	11.0	10.0	10.5
20	15.5	12.0	13.5	14.0	13.0	13.5	13.5	11.5	12.5	11.0	9.0	10.0
21	15.5	12.0	13.5	13.5	12.0	13.0	14.5	11.0	12.5	10.5	7.5	8.5
22	16.0	11.5	13.5	14.5	13.0	13.5	14.0	10.5	12.5	10.0	7.0	8.5
23	16.0	11.5	14.0	13.0	12.0	12.5	13.0	10.5	12.0	9.5	8.0	9.0
24	14.5	12.5	13.5	13.5	12.0	12.5	12.5	11.5	12.0	9.5	7.5	8.5
25	16.0	12.0	14.0	14.5	12.0	13.0	13.5	10.5	12.0	9.0	7.0	8.0
26	16.5	13.0	14.5	14.5	12.5	13.0	13.5	11.0	12.0	9.0	6.5	8.0
27	16.5	12.5	14.5	15.0	12.0	13.5	13.5	10.5	12.0	8.5	5.5	7.0
28	16.5	13.0	15.0	15.0	11.5	13.0	12.5	11.0	11.5	8.5	7.0	7.5
29	16.5	13.0	14.5	15.5	12.5	13.5	11.5	10.5	11.0	8.5	6.0	7.0
30	14.5	12.5	13.5	13.5	12.5	13.0	12.0	10.5	11.0	8.0	5.5	7.0
31	---	---	---	14.0	12.0	13.0	12.0	10.0	11.0	---	---	---
MONTH	16.5	9.0	12.8	15.5	11.0	12.9	15.5	10.0	12.6	12.5	5.5	9.4

15275100 CHESTER CREEK AT ARCTIC BOULEVARD AT ANCHORAGE--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	237	229	231	325	256	268	269	260	264	236	228	230
2	238	232	235	261	256	258	271	264	268	248	236	242
3	241	237	238	263	259	260	272	269	270	248	233	242
4	244	239	241	263	260	261	273	265	268	233	229	230
5	248	226	239	260	256	259	273	---	---	243	231	238
6	240	199	225	257	254	256	---	233	---	240	229	234
7	243	232	239	258	255	256	596	233	333	422	226	296
8	243	241	242	261	256	258	412	237	273	408	263	---
9	246	242	244	671	252	344	238	234	235	276	270	273
10	247	244	246	511	244	373	244	236	238	276	271	272
11	247	244	246	244	108	189	239	234	236	280	273	277
12	252	243	246	251	237	247	242	234	237	273	266	268
13	250	245	247	254	250	251	239	234	236	266	265	266
14	249	244	248	252	247	250	245	238	242	332	265	273
15	249	246	248	263	249	253	248	242	246	1090	332	668
16	250	247	249	265	252	258	245	235	238	575	281	339
17	250	246	249	262	255	259	242	235	239	337	277	291
18	252	246	249	471	257	279	240	229	232	1240	294	430
19	253	248	250	279	258	263	233	231	232	776	332	448
20	251	249	250	260	257	258	508	230	275	340	302	311
21	256	250	252	314	255	271	463	232	307	307	304	305
22	265	249	253	295	256	262	246	233	242	319	303	310
23	392	247	275	257	255	256	247	235	241	383	305	335
24	269	248	255	262	257	259	235	231	233	349	298	311
25	264	246	252	263	258	260	238	235	236	299	280	285
26	256	248	250	268	263	266	244	231	235	284	270	278
27	258	251	254	266	264	265	241	233	235	292	263	273
28	262	257	259	274	263	266	236	231	233	279	263	269
29	262	259	261	422	261	336	315	230	242	265	261	263
30	262	260	261	291	259	267	327	230	263	265	260	262
31	385	258	304	---	---	---	230	227	228	266	260	263
MONTH	392	199	250	671	108	267	---	227	---	1240	226	300

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	264	256	260	325	279	289	336	300	309	282	271	275
2	264	258	261	409	280	309	322	302	309	314	268	287
3	265	259	261	358	287	315	310	256	294	268	201	233
4	265	256	261	302	282	292	328	245	274	285	216	251
5	266	255	259	760	271	406	328	258	307	287	259	275
6	264	258	261	463	283	313	310	258	280	286	269	280
7	264	261	262	951	284	476	291	247	276	284	270	277
8	275	264	268	523	302	368	280	220	255	284	244	273
9	266	260	263	711	316	483	292	221	262	283	243	268
10	268	262	266	645	387	527	282	269	268	305	283	290
11	270	261	264	575	383	479	275	219	251	336	301	313
12	264	258	260	541	430	483	280	227	262	311	300	303
13	272	253	264	475	367	412	280	267	276	358	309	327
14	281	266	274	414	368	390	273	264	269	358	328	347
15	270	265	268	428	380	403	278	261	269	361	284	319
16	271	255	265	432	370	400	276	260	268	290	253	272
17	261	253	257	395	350	365	276	269	272	290	273	284
18	275	256	265	357	344	347	273	270	272	293	284	287
19	257	250	254	367	334	351	273	268	271	290	283	288
20	269	251	255	353	337	344	282	267	275	306	288	298
21	419	259	314	342	320	333	279	267	272	304	297	300
22	417	268	308	342	318	331	275	269	272	316	301	311
23	277	264	270	320	306	316	274	266	270	313	300	306
24	277	263	269	317	303	309	278	272	274	305	297	302
25	284	265	269	320	297	307	297	273	283	315	305	311
26	523	263	350	362	295	322	276	264	272	322	313	318
27	763	341	493	344	245	291	270	257	265	344	322	332
28	649	284	352	295	250	267	271	265	268	340	326	332
29	---	---	---	438	250	311	275	270	273	336	303	326
30	---	---	---	544	289	380	278	270	274	309	301	304
31	---	---	---	446	304	359	---	---	---	305	299	301
MONTH	763	250	281	951	245	364	336	219	275	361	201	296

15275100 CHESTER CREEK AT ARCTIC BOULEVARD AT ANCHORAGE--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	299	286	294	256	245	252	259	251	253	261	249	255
2	290	264	272	249	244	247	260	250	254	261	152	234
3	289	265	278	275	230	254	264	127	214	240	135	191
4	269	255	261	230	81	171	240	163	205	247	118	212
5	265	250	256	217	63	137	250	240	247	237	126	196
6	270	247	258	220	99	172	278	249	253	251	236	243
7	262	248	257	228	212	221	260	249	253	254	201	241
8	268	260	263	235	113	186	259	250	253	243	195	229
9	266	251	258	229	182	210	260	252	255	262	236	244
10	257	249	253	237	208	228	262	252	256	256	242	248
11	258	229	251	244	198	221	261	251	255	256	244	248
12	251	229	241	253	244	249	260	254	257	252	248	250
13	251	243	246	258	242	251	264	252	257	257	248	253
14	255	249	251	253	226	241	260	251	255	256	238	246
15	260	252	255	254	247	250	263	254	258	256	249	252
16	261	257	259	253	245	250	263	231	257	262	251	255
17	257	251	255	252	245	249	268	208	254	258	250	253
18	264	255	260	254	250	252	242	173	211	260	242	252
19	266	260	264	257	223	251	270	230	252	255	229	244
20	261	248	255	235	173	207	254	216	240	259	252	255
21	258	249	252	241	224	235	260	250	253	262	256	258
22	276	258	267	234	150	198	259	250	253	265	257	261
23	287	273	280	257	234	243	262	250	255	263	255	260
24	277	263	266	254	242	246	260	242	252	271	257	261
25	270	261	264	253	238	244	259	250	253	278	268	274
26	264	246	254	251	244	247	260	249	256	276	261	267
27	254	244	248	255	249	251	259	248	254	272	262	267
28	261	248	255	257	250	254	261	250	257	271	264	268
29	265	253	260	260	251	255	258	250	254	270	260	265
30	260	251	256	261	234	249	261	250	255	270	264	266
31	---	---	---	253	237	249	262	250	256	---	---	---
MONTH	299	229	260	275	63	231	278	127	250	278	118	248

15276000 SHIP CREEK NEAR ANCHORAGE

LOCATION.--Lat 61°13'32", long 149°38'06", in SW¹/₄ SE¹/₄ sec. 9, T. 13 N., R. 2 W. (Anchorage A-8 quad), Municipality of Anchorage, Hydrologic Unit 19020401, in Fort Richardson Military Reservation, on left bank, 800 ft downstream from diversion dam, 3.3 mi upstream from North Fork Ship Creek, and 7.8 mi east of intersection of Seward and Glenn Highways in Anchorage.

DRAINAGE AREA.--90.5 mi².

PERIOD OF RECORD.--October 1946 to current year.

REVISED RECORDS.--WSP 1936: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 490 ft above sea level, from topographic map. Prior to August 22, 1985, water-stage recorder at dam 800 ft upstream. See WSP 1936 for history of changes prior to October 1, 1954.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Discharge data represent the net flow remaining after diversion for water supply to Fort Richardson, Elmendorf Air Force Base, and Municipality of Anchorage. Average diversion for water year 2001 was 8.34 ft³/s. Diversion began in 1944. Magnitude of discharges downstream of dam may be affected by periodic spillway adjustment.

COOPERATION.--Gage inspected and records of diversion provided by Office of Post Engineers, Fort Richardson.

REVISIONS.--Revised figures of discharge for water years 1987 through 1997 are given below. These figures supercede those published in reports for 1987-97.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	206	172	e85	e30	e29	e19	e12	27	306	463	245	97
2	206	164	e85	e30	e29	e20	e12	31	326	417	219	92
3	221	147	e80	e30	e29	e21	e14	34	323	386	198	104
4	246	141	e80	e30	e28	e21	e15	40	304	360	189	196
5	220	135	e80	e30	e28	e19	e13	45	340	360	196	163
6	207	124	e85	e30	e27	e17	e12	48	391	356	199	177
7	198	109	e85	e30	e26	e16	e14	53	382	329	189	264
8	194	124	87	e30	e25	e15	e12	58	390	296	175	381
9	187	115	131	e30	e23	e14	e14	66	364	274	163	324
10	291	115	129	e28	e22	e13	e17	66	330	261	157	290
11	796	113	116	e28	e21	e12	e17	71	318	261	155	251
12	721	107	89	e28	e20	e11	e15	84	318	271	156	228
13	626	101	76	e28	e19	e11	e14	92	307	280	177	201
14	577	113	70	e28	e19	e10	e14	108	343	266	192	185
15	484	111	68	e30	e18	e10	e13	127	356	242	194	174
16	435	92	67	e30	e18	e10	e12	149	354	252	186	167
17	379	87	62	e30	e18	e11	e12	193	334	262	175	166
18	346	e90	61	e30	e17	e12	e10	181	303	280	165	155
19	326	e90	60	e30	e17	e11	e11	162	283	281	156	153
20	309	e90	56	e30	e17	e11	e12	166	300	289	148	148
21	295	e90	e55	e30	e17	e12	e14	190	375	303	137	140
22	264	e90	e50	e32	e17	e12	e15	190	456	301	130	135
23	241	e90	e45	e32	e17	e12	17	169	422	296	125	267
24	224	e85	e40	e34	e17	e13	20	182	379	264	116	279
25	206	e85	e38	e34	e18	e13	24	178	339	256	112	234
26	190	e85	e36	e32	e19	e14	21	170	314	256	110	211
27	176	e85	e34	e32	e20	e14	20	194	326	252	107	195
28	162	e85	e32	e32	e20	e15	19	212	318	249	107	180
29	142	e85	e30	e32	---	e15	20	234	448	256	108	168
30	139	e85	e30	e30	---	e13	25	254	546	269	103	159
31	159	---	e30	e30	---	e12	---	281	---	274	96	---
TOTAL	9373	3205	2072	940	595	429	460	4055	10595	9162	4885	5884
MEAN	302	107	66.8	30.3	21.2	13.8	15.3	131	353	296	158	196
MAX	796	172	131	34	29	21	25	281	546	463	245	381
MIN	139	85	30	28	17	10	10	27	283	242	96	92
AC-FT	18590	6360	4110	1860	1180	851	912	8040	21020	18170	9690	11670

ADJUSTED TO INCLUDE DIVERSION

	MEAN	329	133	94.0	57.1	48.3	40.0	41.2	158	383	328	191	203
CFSM	3.64	1.47	1.04	0.63	0.53	0.44	0.46	1.75	4.23	3.62	2.11	2.24	2.24
IN	4.19	1.64	1.20	0.73	0.56	0.51	0.51	2.02	4.72	4.18	2.44	2.50	2.50
AC-FT	20250	7940	5780	3510	2680	2460	2450	9740	22800	20180	11760	12060	12060

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1987, BY WATER YEAR (WY)#

	MEAN	154	80.8	47.8	30.8	21.2	15.8	21.7	148	440	321	225	213
MAX	302	177	107	79.3	54.6	42.1	49.4	341	798	645	510	471	471
(WY)	1987	1953	1948	1961	1961	1947	1964	1960	1977	1980	1981	1967	1967
MIN	48.7	24.3	13.9	7.13	5.36	3.61	4.77	39.9	224	128	94.6	55.8	55.8
(WY)	1969	1969	1969	1956	1983	1956	1954	1971	1954	1954	1969	1969	1969

See Period of Record and Remarks. Values shown on this page are unadjusted for diversion, unless otherwise noted
e Estimated

15276000 SHIP CREEK NEAR ANCHORAGE--Continued

REVISIONS.--Continued.

SUMMARY STATISTICS	FOR 1986 CALENDAR YEAR		FOR 1987 WATER YEAR		WATER YEARS 1947 - 1987#	
ANNUAL TOTAL	45992.0		51655			
ANNUAL MEAN	126		142		144	
ANNUAL MEAN	*151		*167		*161	
HIGHEST ANNUAL MEAN					223	
LOWEST ANNUAL MEAN					67.3	
HIGHEST DAILY MEAN	796	Oct 11	796	Oct 11	1420	Aug 9 1971
LOWEST DAILY MEAN	6.5	Apr 22	a10	Mar 14	b.00	Jan 2 1956
ANNUAL SEVEN-DAY MINIMUM	7.9	Apr 19	11	Mar 11	.43	Jan 9 1956
MAXIMUM PEAK FLOW			921	Oct 11	1860	Jun 21 1949
MAXIMUM PEAK STAGE			6.08	Oct 11	c3.44	Jun 21 1949
MAXIMUM PEAK STAGE					d6.08	Oct 11 1986
INSTANTANEOUS LOW FLOW			f6.4	Apr 7		
ANNUAL RUNOFF (AC-FT)	91230		102500		104000	
ANNUAL RUNOFF (AC-FT)	*110000		*121600		*117400	
ANNUAL RUNOFF (CFSM)	*1.67		*1.85		*1.79	
ANNUAL RUNOFF (IN)	*22.80		*25.19		*24.31	
10 PERCENT EXCEEDS	262		325		366	
50 PERCENT EXCEEDS	97		107		77	
90 PERCENT EXCEEDS	12		14		14	

- # See Period of Record and Remarks. Values shown on this page are unadjusted for diversion, unless otherwise noted
- * Adjusted to account for diversion, see Remarks
- a From Mar. 14 to 16 and Apr. 18
- b No flow during one or more days in water years 1956, 1960, 1969, and 1971
- c Site and datum then in use
- d Current site and datum
- f Minimum observed, from current-meter measurement, but may have been less during periods of ice effect in Mar. and Apr.

15276000 SHIP CREEK NEAR ANCHORAGE--Continued

REVISIONS.--Continued.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	150	e100	e50	e34	e16	e8.0	e3.0	e32	402	548	216	213
2	168	102	e50	e34	e16	e7.0	e4.0	e32	432	598	238	189
3	176	100	e48	e34	e15	e7.0	e3.0	e28	486	651	223	180
4	153	100	e48	e34	e15	e6.0	e3.0	36	559	633	208	191
5	144	89	e48	e30	e14	e6.0	e2.0	e36	625	591	201	177
6	135	89	e48	e28	e14	e6.0	e2.0	48	772	540	202	162
7	131	85	e50	e28	e14	e6.0	e2.0	59	807	500	196	153
8	127	85	e50	e26	e13	e5.0	e4.0	e75	804	458	183	140
9	128	e80	e50	e26	e13	e4.0	e4.0	e85	882	439	165	135
10	140	e80	e50	e22	e13	e4.0	e4.0	104	913	477	162	134
11	131	e80	e50	e22	e13	e6.0	e4.0	122	881	509	230	127
12	123	80	e50	e22	e12	e6.0	e4.0	136	822	480	249	122
13	118	77	e50	e22	e13	e5.0	e4.0	143	800	468	226	129
14	119	66	e50	e22	e13	e4.0	e4.0	150	812	453	196	122
15	125	e62	e50	e22	e13	e4.0	e4.0	145	820	433	173	115
16	116	e62	e48	e22	e13	e4.0	e6.0	150	762	460	161	112
17	116	e62	e48	e22	e13	e4.0	e6.0	171	731	437	159	106
18	119	e62	e48	e20	e13	e4.0	e8.0	177	737	401	159	104
19	144	63	e46	e20	e13	e4.0	e9.0	222	702	379	152	101
20	130	63	e46	e18	e12	e5.0	e9.0	227	655	376	144	153
21	126	61	e44	e18	e13	e4.0	e12	238	601	373	149	195
22	156	e55	e44	e18	e13	e4.0	e10	277	606	334	184	186
23	148	54	e42	e18	e13	e4.0	e12	306	592	303	176	177
24	139	55	e39	e18	e12	e4.0	e15	306	562	282	150	164
25	128	e50	e38	e18	e11	e4.0	e10	321	551	256	144	149
26	119	e50	e36	e16	e9.0	e4.0	e11	354	589	240	224	138
27	105	e50	e35	e16	e8.0	e4.0	e26	406	605	235	236	136
28	106	e50	e35	e16	e8.0	e4.0	e34	427	565	235	216	131
29	92	e50	e36	e16	e8.0	e4.0	e37	444	553	220	206	123
30	104	e50	e36	e16	---	e4.0	e34	443	553	208	242	120
31	e100	---	e34	e16	---	e4.0	---	428	---	197	223	---
TOTAL	4016	2112	1397	694	366.0	149.0	290.0	6128	20181	12714	5993	4384
MEAN	130	70.4	45.1	22.4	12.6	4.81	9.67	198	673	410	193	146
MAX	176	102	50	34	16	8.0	37	444	913	651	249	213
MIN	92	50	34	16	8.0	4.0	2.0	28	402	197	144	101
AC-FT	7970	4190	2770	1380	726	296	575	12150	40030	25220	11890	8700

ADJUSTED TO INCLUDE DIVERSION

MEAN	161	99.0	73.7	52.6	43.5	35.5	36.6	224	707	447	223	177
CFSM	1.78	1.09	0.81	0.58	0.48	0.39	0.40	2.48	7.82	4.93	2.46	1.96
IN	2.05	1.22	0.94	0.67	0.52	0.45	0.45	2.86	8.72	5.69	2.84	2.18
AC-FT	9910	5890	4530	3240	2500	2180	2180	13790	42090	27460	13720	10540

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1988, BY WATER YEAR (WY)#

MEAN	153	80.6	47.8	30.6	20.9	15.5	21.4	149	445	323	224	211
MAX	302	177	107	79.3	54.6	42.1	49.4	341	798	645	510	471
(WY)	1987	1953	1948	1961	1961	1947	1964	1960	1977	1980	1981	1967
MIN	48.7	24.3	13.9	7.13	5.36	3.61	4.77	39.9	224	128	94.6	55.8
(WY)	1969	1969	1969	1956	1983	1956	1954	1971	1954	1954	1969	1969

SUMMARY STATISTICS	FOR 1987 CALENDAR YEAR	FOR 1988 WATER YEAR	WATER YEARS 1947 - 1988#
ANNUAL TOTAL	44530	58424.0	
ANNUAL MEAN	122	160	144
ANNUAL MEAN	*149	*190	*162
HIGHEST ANNUAL MEAN			223
LOWEST ANNUAL MEAN			67.3
HIGHEST DAILY MEAN	546	Jun 30	1420
LOWEST DAILY MEAN	a10	Mar 14	b2.0
ANNUAL SEVEN-DAY MINIMUM	11	Mar 11	2.7
MAXIMUM PEAK FLOW			983
MAXIMUM PEAK STAGE			6.06
MAXIMUM PEAK STAGE			Jun 9
INSTANTANEOUS LOW FLOW		g1.4	Apr 7
ANNUAL RUNOFF (AC-FT)	88330	115900	104200
ANNUAL RUNOFF (AC-FT)	*108000	*138000	*117400
ANNUAL RUNOFF (CFSM)	*1.64	*2.10	*1.79
ANNUAL RUNOFF (IN)	*22.37	*28.60	*24.31
10 PERCENT EXCEEDS	303	482	369
50 PERCENT EXCEEDS	80	85	77
90 PERCENT EXCEEDS	14	5.0	13

See Period of Record and Remarks. Values shown on this page are unadjusted for diversion, unless otherwise noted
 * Adjusted to account for diversion, see Remarks
 a From Mar. 14 to 16 and Apr. 7
 b Apr. 5 to 7
 c No flow during one or more days in water years 1956, 1960, 1969, and 1971
 d Site and datum then in use
 e Estimated
 f Current site and datum
 g Minimum observed, from current-meter measurement, but may have been less during periods of ice effect in Mar. and Apr.

15276000 SHIP CREEK NEAR ANCHORAGE--Continued

REVISIONS.--Continued.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	86	e50	e40	e8.0	e7.0	e15	80	317	362	244	569
2	112	81	e50	e40	e8.0	e6.5	e15	98	282	383	276	575
3	112	e75	e50	e40	e8.0	e6.0	e15	114	311	364	250	537
4	156	e75	e50	e40	e8.0	e6.5	e14	121	383	348	221	459
5	226	e75	e50	e40	e8.0	e6.5	e14	109	396	348	201	535
6	297	e75	e50	e35	e8.0	e6.5	e13	97	383	309	196	531
7	286	e70	e60	e35	e8.0	e6.5	e13	100	389	294	245	529
8	275	e70	e70	e35	e8.0	e6.5	e13	114	411	254	208	504
9	244	e70	e65	e30	e8.0	e6.5	e12	125	411	249	202	469
10	215	e70	e65	e30	e9.0	e6.5	e12	127	374	233	193	451
11	222	e70	e65	e30	e9.0	e7.0	e11	134	368	226	189	403
12	204	e65	e65	e30	e9.0	e7.5	e11	123	367	225	177	384
13	190	e65	e60	e28	e9.0	e8.0	e10	117	353	217	175	353
14	166	e65	e45	e28	e9.0	e8.5	e12	115	382	221	168	332
15	153	e65	e35	e28	e9.0	e9.0	e13	111	400	202	156	298
16	148	e60	e30	e28	e9.0	e9.5	e14	117	363	185	148	273
17	142	e60	e25	e26	e9.0	e11	e16	132	335	171	142	282
18	147	e55	e25	e22	e9.0	e11	19	124	357	160	143	287
19	143	e55	e25	e15	e9.0	e11	22	123	369	158	151	264
20	140	e55	e25	e12	e9.0	e12	27	138	383	199	148	249
21	126	e55	e25	e10	e8.5	e12	30	183	373	199	144	253
22	120	e55	e25	e9.0	e8.5	e12	35	196	365	186	139	242
23	110	e55	e25	e8.0	e8.0	e12	38	195	370	198	129	234
24	111	e55	e25	e7.5	e8.0	e13	35	194	432	242	131	243
25	105	e55	e25	e7.0	e7.5	e13	48	189	381	232	215	305
26	102	e55	e30	e7.0	e7.5	e14	56	206	364	204	982	356
27	102	e55	e30	e7.0	e7.0	e15	65	233	362	180	1130	340
28	104	e55	e30	e7.0	e7.0	e15	80	253	370	173	1010	301
29	107	e50	e35	e8.0	---	e15	71	306	369	181	898	241
30	97	e50	e35	e8.0	---	e16	74	378	370	202	754	234
31	90	---	e40	e8.0	---	e16	---	368	---	195	623	---
TOTAL	4862	1902	1285	698.5	233.0	312.5	823	5020	11090	7300	9988	11033
MEAN	157	63.4	41.5	22.5	8.32	10.1	27.4	162	370	235	322	368
MAX	297	86	70	40	9.0	16	80	378	432	383	1130	575
MIN	90	50	25	7.0	7.0	6.0	10	80	282	158	129	234
AC-FT	9640	3770	2550	1390	462	620	1630	9960	22000	14480	19810	21880

ADJUSTED TO INCLUDE DIVERSION

MEAN	186	93.3	69.8	50.8	37.8	37.9	52.1	189	401	267	346	405
CFSM	2.05	1.03	0.77	0.56	0.42	0.42	0.58	2.08	4.43	2.95	3.83	4.47
IN	2.37	1.15	0.89	0.65	0.43	0.48	0.64	2.40	4.94	3.40	4.41	4.99
AC-FT	11430	5550	4290	3120	2100	2330	3100	11600	23870	16400	21300	24100

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1989, BY WATER YEAR (WY)#

MEAN	153	80.2	47.6	30.5	20.7	15.4	21.5	149	444	321	226	215
MAX	302	177	107	79.3	54.6	42.1	49.4	341	798	645	510	471
(WY)	1987	1953	1948	1961	1961	1947	1964	1960	1977	1980	1981	1967
MIN	48.7	24.3	13.9	7.13	5.36	3.61	4.77	39.9	224	128	94.6	55.8
(WY)	1969	1969	1969	1956	1983	1956	1954	1971	1954	1954	1969	1969

SUMMARY STATISTICS	FOR 1988 CALENDAR YEAR		FOR 1989 WATER YEAR		WATER YEARS 1947 - 1989#	
ANNUAL TOTAL	58948.0		54547.0			
ANNUAL MEAN	161		149		144	
ANNUAL MEAN	*191		*178		*163	
HIGHEST ANNUAL MEAN					223	
LOWEST ANNUAL MEAN					67.3	
HIGHEST DAILY MEAN	913	Jun 10	1130	Aug 27	1420	Aug 9 1971
LOWEST DAILY MEAN	a2.0	Apr 5	6.0	Mar 3	b.00	Jan 2 1956
ANNUAL SEVEN-DAY MINIMUM	2.7	Apr 1	6.4	Mar 2	.43	Jan 9 1956
MAXIMUM PEAK FLOW			1260	Aug 27	1860	Jun 21 1949
MAXIMUM PEAK STAGE			6.38	Aug 27	c3.44	Jun 21 1949
MAXIMUM PEAK STAGE					d6.38	Aug 27 1989
ANNUAL RUNOFF (AC-FT)	116900		108200		104300	
ANNUAL RUNOFF (AC-FT)	*139000		*129200		*118100	
ANNUAL RUNOFF (CFSM)	*2.11		*1.97		*1.80	
ANNUAL RUNOFF (IN)	*28.79		*26.77		*24.46	
10 PERCENT EXCEEDS	482		369		369	
50 PERCENT EXCEEDS	72		90		77	
90 PERCENT EXCEEDS	5.0		8.0		13	

See Period of Record and Remarks. Values shown on this page are unadjusted for diversion, unless otherwise noted

* Adjusted to account for diversion, see Remarks

a Apr. 5 to 7

b No flow during one or more days in water years 1956, 1960, 1969, and 1971

c Site and datum then in use

d Current site and datum

e Estimated

15276000 SHIP CREEK NEAR ANCHORAGE--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	275	145	e60	e34	e28	e22	e14	259	719	313	98	81
2	264	150	e60	e34	e28	e20	e14	215	700	297	91	78
3	238	165	e60	e34	e28	e20	e15	194	691	282	87	82
4	241	150	e60	e34	e28	e20	e14	181	726	270	94	115
5	239	143	e60	e34	e28	e20	e13	187	766	e260	94	98
6	250	127	e55	e32	e28	e19	e13	212	789	e240	84	99
7	243	e120	e55	e32	e28	e18	e13	217	825	e220	79	97
8	237	e110	e55	e32	e28	e17	e13	229	777	e200	77	117
9	222	e100	e55	e32	e28	e16	e13	273	683	e190	82	302
10	213	e90	e55	e32	e28	e15	e13	354	626	185	81	391
11	193	e80	e55	e30	e28	e15	e14	375	585	172	88	372
12	182	e80	e55	e30	e28	e15	e16	418	509	165	83	374
13	e180	e80	e50	e30	e28	e14	e19	464	514	151	79	418
14	e180	e80	e50	e30	e28	e9.0	e24	458	544	150	77	450
15	e190	e80	e50	e30	e28	e4.5	e28	461	498	145	76	409
16	e190	e75	e50	e30	e28	e2.5	e36	520	492	141	78	347
17	200	e75	e50	e30	e26	e2.0	e38	566	480	136	76	302
18	215	e75	e50	e30	e26	e2.0	e50	636	397	130	78	268
19	215	e75	e48	e30	e26	e2.0	e65	636	362	131	81	252
20	205	e75	e48	e30	e26	e2.0	e80	682	335	135	85	245
21	184	e70	e46	e30	e24	e2.0	e90	688	326	136	83	228
22	181	e70	e46	e30	e24	e3.0	e110	559	e320	131	98	245
23	207	e70	e44	e30	e24	e4.0	e120	460	e300	125	89	238
24	184	e70	e42	e30	e22	e6.0	131	442	e320	122	84	226
25	166	e70	e40	e30	e22	e9.0	141	490	e320	118	79	207
26	181	e65	e38	e30	e22	e12	149	572	329	112	95	196
27	238	e65	e36	e30	e22	e13	163	610	321	108	91	193
28	172	e65	e36	e30	e22	e13	198	611	316	108	91	193
29	153	e65	e36	e30	---	e14	241	710	317	120	e95	183
30	143	e65	e36	e30	---	e15	242	721	317	114	e90	200
31	141	---	e36	e30	---	e14	---	737	---	112	e80	---
TOTAL	6322	2750	1517	960	734	360.0	2090	14137	15204	5219	2643	7006
MEAN	204	91.7	48.9	31.0	26.2	11.6	69.7	456	507	168	85.3	234
MAX	275	165	60	34	28	22	242	737	825	313	98	450
MIN	141	65	36	30	22	2.0	13	181	300	108	76	78
AC-FT	12540	5450	3010	1900	1460	714	4150	28040	30160	10350	5240	13900

ADJUSTED TO INCLUDE DIVERSION

MEAN	225	119	82.4	56.4	49.4	36.4	94.1	482	533	200	115	250
CFM	2.49	1.31	0.91	0.62	0.54	0.40	1.04	5.32	5.89	2.21	1.27	2.76
IN	2.87	1.47	1.05	0.72	0.57	0.46	1.16	6.13	6.57	2.55	1.47	3.08
AC-FT	13840	7080	5060	3470	2740	2240	5600	29610	31730	12300	7080	14860

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1990, BY WATER YEAR (WY)#

MEAN	154	80.4	47.6	30.5	20.8	15.3	22.6	156	445	317	223	215
MAX	302	177	107	79.3	54.6	42.1	69.7	456	798	645	510	471
(WY)	1987	1953	1948	1961	1961	1947	1990	1990	1977	1980	1981	1967
MIN	48.7	24.3	13.9	7.13	5.36	3.61	4.77	39.9	224	128	85.3	55.8
(WY)	1969	1969	1969	1956	1983	1956	1954	1971	1954	1954	1990	1969

See Period of Record and Remarks. Values shown on this page are unadjusted for diversion, unless otherwise noted
e Estimated

15276000 SHIP CREEK NEAR ANCHORAGE--Continued

SUMMARY STATISTICS	FOR 1989 CALENDAR YEAR		FOR 1990 WATER YEAR		WATER YEARS 1947 - 1990#	
ANNUAL TOTAL	57087.0		58942.0			
ANNUAL MEAN	156		161		144	
ANNUAL MEAN	*184		*187		*163	
HIGHEST ANNUAL MEAN					223	1980
LOWEST ANNUAL MEAN					67.3	1969
HIGHEST DAILY MEAN	1130	Aug 27	825	Jun 7	1420	Aug 9 1971
LOWEST DAILY MEAN	6.0	Mar 3	a2.0	Mar 17	b.00	Jan 2 1956
ANNUAL SEVEN-DAY MINIMUM	6.4	Mar 2	2.2	Mar 16	.43	Jan 9 1956
MAXIMUM PEAK FLOW			862	Jun 7	1860	Jun 21 1949
MAXIMUM PEAK STAGE			6.02	Jun 7	c3.44	Jun 21 1949
MAXIMUM PEAK STAGE					d6.38	Aug 27 1989
ANNUAL RUNOFF (AC-FT)	113200		116900		104600	
ANNUAL RUNOFF (AC-FT)	*133900		*135600		*118100	
ANNUAL RUNOFF (CFSM)	*2.04		*2.06		*1.80	
ANNUAL RUNOFF (IN)	*27.74		*28.10		*24.46	
10 PERCENT EXCEEDS	369		445		369	
50 PERCENT EXCEEDS	115		87		78	
90 PERCENT EXCEEDS	8.0		18		13	

See Period of Record and Remarks. Values shown on this page are unadjusted for diversion, unless otherwise noted

* Adjusted to account for diversion, see Remarks

a Mar. 17 to 21

b No flow during one or more days in water years 1956, 1960, 1969, and 1971

c Site and datum then in use

d Current site and datum

15276000 SHIP CREEK NEAR ANCHORAGE--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	175	e66	e25	e15	e14	e14	e11	e30	260	409	199	119
2	151	e66	e25	e15	e14	e14	e11	e38	267	368	204	118
3	146	e66	e24	e15	e14	e14	e11	44	285	346	199	121
4	137	e66	e24	e15	e14	e14	e11	50	326	343	193	130
5	145	e66	e23	e15	e14	e14	e11	50	301	350	188	134
6	142	e64	e23	e15	e14	e14	e11	57	305	297	177	137
7	140	e62	e22	e15	e14	e14	e11	62	295	276	169	136
8	136	e60	e22	e15	e14	e14	e11	59	294	266	160	140
9	120	e58	e21	e15	e14	e14	e11	56	296	306	157	145
10	116	e56	e21	e15	e14	e14	e11	54	294	292	150	158
11	119	e52	e21	e15	e14	e13	e11	54	330	428	150	173
12	116	e50	e20	e15	e14	e13	e11	53	380	452	148	161
13	106	e47	e20	e15	e14	e13	e11	56	407	397	143	158
14	103	e45	e19	e15	e14	e13	e11	55	454	361	138	156
15	e80	e43	e19	e15	e14	e13	e11	57	491	319	137	153
16	e80	e41	e19	e15	e14	e13	e11	64	476	316	131	173
17	e75	e40	e18	e15	e14	e13	e11	74	470	321	188	201
18	e75	e38	e18	e15	e14	e13	e11	81	442	291	201	190
19	e70	e36	e18	e15	e14	e13	e11	78	441	280	148	176
20	e70	e35	e17	e15	e14	e13	e11	94	508	274	118	178
21	e70	e34	e17	e15	e14	e12	e11	129	568	254	96	164
22	e70	e33	e17	e15	e14	e12	e11	156	598	245	92	154
23	e70	e32	e16	e15	e14	e12	e12	194	585	247	87	157
24	e70	e31	e16	e15	e14	e12	e13	242	529	236	86	145
25	e70	e30	e16	e15	e14	e12	e14	312	493	220	106	138
26	e68	e29	e15	e15	e14	e12	e15	335	438	205	111	164
27	e68	e28	e15	e15	e14	e12	e17	297	418	192	105	184
28	e68	e27	e15	e15	e14	e12	e19	276	405	186	110	169
29	e68	e26	e15	e15	---	e12	e21	328	393	200	115	165
30	e68	e26	e15	e15	---	e12	e25	308	415	196	117	155
31	e68	---	e15	e15	---	e12	---	277	---	192	118	---
TOTAL	3060	1353	591	465	392	402	378	4020	12164	9065	4441	4652
MEAN	98.7	45.1	19.1	15.0	14.0	13.0	12.6	130	405	292	143	155
MAX	175	66	25	15	14	14	25	335	598	452	204	201
MIN	68	26	15	15	14	12	11	30	260	186	86	118
AC-FT	6070	2680	1170	922	778	797	750	7970	24130	17980	8810	9230

ADJUSTED TO INCLUDE DIVERSION

MEAN	129	78.7	51.3	46.4	39.8	32.7	33.7	156	428	317	168	177
CFM	1.43	0.87	0.57	0.51	0.44	0.36	0.37	1.72	4.73	3.50	1.86	1.96
IN	1.65	0.97	0.65	0.59	0.46	0.42	0.42	1.99	5.28	4.03	2.14	2.18
AC-FT	7958	4681	3151	2851	2213	2013	2008	9595	25462	19465	10351	10551

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1991, BY WATER YEAR (WY)#

MEAN	153	79.6	47.0	30.1	20.6	15.3	22.4	156	444	317	221	214
MAX	302	177	107	79.3	54.6	42.1	69.7	456	798	645	510	471
(WY)	1987	1953	1948	1961	1961	1947	1990	1990	1977	1980	1981	1967
MIN	48.7	24.3	13.9	7.13	5.36	3.61	4.77	39.9	224	128	85.3	55.8
(WY)	1969	1969	1969	1956	1983	1956	1954	1971	1954	1954	1990	1969

See Period of Record and Remarks. Values shown on this page are unadjusted for diversion,
unless otherwise noted
e Estimated

15276000 SHIP CREEK NEAR ANCHORAGE--Continued

SUMMARY STATISTICS	FOR 1990 CALENDAR YEAR		FOR 1991 WATER YEAR		WATER YEARS 1947 - 1991#	
ANNUAL TOTAL	53357.0		40983		144	
ANNUAL MEAN	146		112		144	
ANNUAL MEAN	*173		*138		*163	
HIGHEST ANNUAL MEAN					223	
LOWEST ANNUAL MEAN					67.3	
HIGHEST DAILY MEAN	825	Jun 7	598	Jun 22	1420	Aug 9 1971
LOWEST DAILY MEAN	a2.0	Mar 17	b11	Apr 1	c.00	Jan 2 1956
ANNUAL SEVEN-DAY MINIMUM	2.2	Mar 16	11	Apr 1	.43	Jan 9 1956
MAXIMUM PEAK FLOW			917		1860	
MAXIMUM PEAK STAGE			5.82		d3.44	
MAXIMUM PEAK STAGE					f6.38	
ANNUAL RUNOFF (AC-FT)	105800		81290		104100	
ANNUAL RUNOFF (AC-FT)	*125400		*100300		*118100	
ANNUAL RUNOFF (CFSM)	*1.91		*1.53		*1.80	
ANNUAL RUNOFF (IN)	*25.98		*20.78		*24.46	
10 PERCENT EXCEEDS	445		310		368	
50 PERCENT EXCEEDS	70		56		77	
90 PERCENT EXCEEDS	15		13		13	

See Period of Record and Remarks. Values shown on this page are unadjusted for diversion, unless otherwise noted

* Adjusted to account for diversion, see Remarks

a Mar. 17 to 22

b Apr. 1 to 22

c No flow during one or more days in water years 1956, 1960, 1969, and 1971

d Site and datum then in use

f Current site and datum

15276000 SHIP CREEK NEAR ANCHORAGE--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153	69	e35	e20	e20	e16	e12	42	608	455	171	156
2	146	71	e35	e20	e20	e16	e12	40	611	464	160	207
3	147	68	e35	e20	e20	e16	e12	40	596	473	157	194
4	144	70	e35	e20	e20	e16	e12	39	561	468	166	183
5	131	74	e35	e20	e20	e16	e12	38	541	447	194	184
6	127	73	e35	e18	e22	e14	e14	37	546	412	183	213
7	121	67	e35	e18	e22	e14	e14	38	576	383	170	206
8	116	63	e35	e18	e22	e14	e16	45	620	346	154	183
9	110	63	e30	e18	e22	e14	e16	51	631	327	141	174
10	110	58	e30	e18	e22	e14	e18	54	659	334	131	164
11	107	54	e30	e16	e24	e12	e18	55	697	392	135	155
12	100	e50	e30	e16	e24	e12	e20	59	674	370	128	149
13	106	e50	e30	e16	e24	e12	e22	70	646	353	124	143
14	105	e50	e30	e16	e24	e12	e24	84	629	338	117	136
15	93	e50	e30	e16	e24	e12	27	93	617	316	112	130
16	100	e50	e30	e14	e22	e10	29	86	568	297	115	122
17	99	e45	e25	e14	e22	e10	29	85	516	293	123	122
18	92	e45	e25	e14	e22	e10	30	98	478	284	113	153
19	108	e45	e25	e14	e22	e10	29	118	472	276	113	138
20	101	e45	e25	e14	e22	e10	29	154	474	293	116	120
21	82	e45	e25	e16	e20	e10	31	190	472	283	105	113
22	92	e45	e25	e16	e20	e10	32	239	475	271	103	110
23	76	e45	e25	e16	e20	e10	32	274	451	253	103	98
24	79	e45	e25	e16	e20	e10	35	319	421	240	102	97
25	72	e40	e25	e16	e20	e10	38	386	409	235	113	94
26	81	e40	e24	e18	e18	e10	41	464	392	231	134	91
27	100	e40	e24	e18	e18	e10	45	499	413	214	120	93
28	77	e40	e24	e18	e18	e10	47	518	424	205	114	e100
29	80	e40	e22	e18	e18	e10	47	530	474	199	111	e95
30	71	e40	e22	e18	---	e10	46	554	488	188	118	e90
31	70	---	e22	e18	---	e10	---	595	---	179	167	---
TOTAL	3196	1580	883	528	612	370	789	5894	16139	9819	4113	4213
MEAN	103	52.7	28.5	17.0	21.1	11.9	26.3	190	538	317	133	140
MAX	153	74	35	20	24	16	47	595	697	473	194	213
MIN	70	40	22	14	18	10	12	37	392	179	102	90
AC-FT	6340	3130	1750	1050	1210	734	1560	11690	32010	19480	8160	8360

ADJUSTED TO INCLUDE DIVERSION

MEAN	126	77.4	52.1	42.5	45.1	35.8	40.2	210	562	344	159	169
CFSM	1.39	0.86	0.58	0.47	0.50	0.40	0.44	2.32	6.21	3.80	1.76	1.87
IN	1.60	0.95	0.66	0.54	0.54	0.46	0.50	2.68	6.93	4.38	2.02	2.09
AC-FT	7730	4600	3200	2610	2590	2200	2390	12930	33450	21140	9770	10070

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1992, BY WATER YEAR (WY)#

MEAN	152	79.1	46.6	29.8	20.6	15.2	22.5	156	446	317	219	212
MAX	302	177	107	79.3	54.6	42.1	69.7	456	798	645	510	471
(WY)	1987	1953	1948	1961	1961	1947	1990	1990	1977	1980	1981	1967
MIN	48.7	24.3	13.9	7.13	5.36	3.61	4.77	39.9	224	128	85.3	55.8
(WY)	1969	1969	1969	1956	1983	1956	1954	1971	1954	1954	1990	1969

See Period of Record and Remarks. Values shown on this page are unadjusted for diversion,
unless otherwise noted
e Estimated

15276000 SHIP CREEK NEAR ANCHORAGE--Continued

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1947 - 1992#	
ANNUAL TOTAL	41638		48136			
ANNUAL MEAN	114		132		143	
ANNUAL MEAN	*138		*155		*162	
HIGHEST ANNUAL MEAN					223	1980
LOWEST ANNUAL MEAN					67.3	1969
HIGHEST DAILY MEAN	598	Jun 22	697	Jun 11	1420	Aug 9 1971
LOWEST DAILY MEAN	a11	Apr 1	b10	Mar 16	c.00	Jan 2 1956
ANNUAL SEVEN-DAY MINIMUM	11	Apr 1	10	Mar 16	.43	Jan 9 1956
MAXIMUM PEAK FLOW			750	Jun 11	1860	Jun 21 1949
MAXIMUM PEAK STAGE			5.90	Jun 11	d3.44	Jun 21 1949
MAXIMUM PEAK STAGE					f6.38	Aug 27 1989
ANNUAL RUNOFF (AC-FT)	82590		95480		103900	
ANNUAL RUNOFF (AC-FT)	*100000		*112700		*117400	
ANNUAL RUNOFF (CFSM)	*1.52		*1.72		*1.79	
ANNUAL RUNOFF (IN)	*20.73		*23.35		*24.30	
10 PERCENT EXCEEDS	310		431		369	
50 PERCENT EXCEEDS	57		56		76	
90 PERCENT EXCEEDS	13		14		13	

See Period of Record and Remarks. Values shown on this page are unadjusted for diversion, unless otherwise noted

* Adjusted to account for diversion, see Remarks

a Apr. 1 to 22

b Mar. 16 to 31

c No flow during one or more days in water years 1956, 1960, 1969, and 1971

d Site and datum then in use

f Current site and datum

15276000 SHIP CREEK NEAR ANCHORAGE--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e90	e50	e30	e19	e13	e13	e15	84	850	196	e85	326
2	90	e46	e30	e19	e13	e13	e15	89	e800	193	e85	335
3	84	e46	e30	e19	e13	e13	e16	96	e750	183	e90	264
4	82	e46	e28	e19	e14	e13	e16	97	e700	175	e90	318
5	79	e46	e28	e18	e14	e13	e16	113	e650	168	e95	332
6	117	e44	e28	e18	e14	e13	e16	117	e600	158	e95	333
7	117	e44	e28	e18	e14	e13	e16	124	e550	149	92	362
8	92	e42	e28	e18	e15	e13	e16	125	e500	141	89	302
9	88	e42	e26	e17	e15	e13	e18	128	486	142	93	265
10	77	e42	e26	e17	e15	e13	e18	131	436	147	88	255
11	69	e42	e26	e17	e15	e13	e20	125	438	155	89	218
12	70	e40	e26	e17	e15	e13	e22	123	440	158	91	223
13	76	e40	e26	e17	e15	e13	e24	148	420	160	90	211
14	70	e40	e24	e16	e15	e13	27	178	413	165	159	203
15	64	e38	e24	e16	e15	e13	29	218	405	158	234	194
16	62	e38	e24	e16	e14	e14	33	276	395	158	220	410
17	e60	e38	e24	e16	e14	e14	37	345	357	149	172	462
18	e60	e36	e24	e15	e14	e14	40	401	333	147	154	383
19	e60	e36	e24	e15	e14	e14	37	464	304	125	131	378
20	e60	e36	e22	e15	e14	e14	37	528	307	121	145	415
21	e55	e36	e22	e14	e14	e14	37	590	322	113	155	567
22	e55	e34	e22	e14	e14	e14	39	626	325	108	164	456
23	e55	e34	e22	e13	e14	e14	43	609	311	102	137	397
24	e55	e34	e22	e13	e14	e14	48	637	281	97	128	358
25	e55	e34	e22	e13	e14	e14	58	621	262	102	123	340
26	e55	e32	e20	e13	e13	e15	67	570	235	95	119	319
27	e50	e32	e20	e13	e13	e15	76	530	234	82	129	322
28	e50	e32	e20	e13	e13	e15	78	548	220	82	113	362
29	e50	e30	e20	e13	---	e15	72	610	210	e80	127	360
30	e50	e30	e20	e13	---	e15	77	684	205	e80	176	557
31	e50	---	e20	e13	---	e15	---	781	---	e85	229	---
TOTAL	2147	1160	756	487	394	425	1063	10716	12739	4174	3987	10227
MEAN	69.3	38.7	24.4	15.7	14.1	13.7	35.4	346	425	135	129	341
MAX	117	50	30	19	15	15	78	781	850	196	234	567
MIN	50	30	20	13	13	13	15	84	205	80	85	194
AC-FT	4260	2300	1500	966	781	843	2110	21260	25270	8280	7910	20290

ADJUSTED TO INCLUDE DIVERSION

MEAN	96.2	63.8	50.4	41.9	39.1	29.7	48.6	367	452	161	158	368
CFM	1.06	0.70	0.56	0.46	0.43	0.33	0.54	4.06	4.99	1.78	1.75	4.06
IN	1.23	0.79	0.64	0.53	0.45	0.38	0.60	4.68	5.57	2.05	2.01	4.53
AC-FT	5920	3800	3100	2580	2170	1830	2890	22590	26880	9890	9720	21870

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1993, BY WATER YEAR (WY)#

MEAN	150	78.2	46.1	29.5	20.5	15.2	22.8	160	446	313	217	215
MAX	302	177	107	79.3	54.6	42.1	69.7	456	798	645	510	471
(WY)	1987	1953	1948	1961	1961	1947	1990	1990	1977	1980	1981	1967
MIN	48.7	24.3	13.9	7.13	5.36	3.61	4.77	39.9	224	128	85.3	55.8
(WY)	1969	1969	1969	1956	1983	1956	1954	1971	1954	1954	1990	

See Period of Record and Remarks. Values shown on this page are unadjusted for diversion,
unless otherwise noted
e Estimated

15276000 SHIP CREEK NEAR ANCHORAGE--Continued

SUMMARY STATISTICS	FOR 1992 CALENDAR YEAR		FOR 1993 WATER YEAR		WATER YEARS 1947 - 1993#	
ANNUAL TOTAL	46540		48275		143	
ANNUAL MEAN	127		132		*162	
ANNUAL MEAN	*152		*156		223	1980
HIGHEST ANNUAL MEAN					67.3	1969
LOWEST ANNUAL MEAN					1420	Aug 9 1971
HIGHEST DAILY MEAN	697	Jun 11	850	Jun 1	c.00	Jan 2 1956
LOWEST DAILY MEAN	a10	Mar 16	b13	Jan 23	.43	Jan 9 1956
ANNUAL SEVEN-DAY MINIMUM	10	Mar 16	13	Jan 23	1860	Jun 21 1949
MAXIMUM PEAK FLOW			d942	Jun 1	f3.44	Jun 21 1949
MAXIMUM PEAK STAGE			6.10	Jun 1	g6.38	Aug 27 1989
MAXIMUM PEAK STAGE					103700	
ANNUAL RUNOFF (AC-FT)	92310		95750		*117400	
ANNUAL RUNOFF (AC-FT)	*110000		*113200		*1.79	
ANNUAL RUNOFF (CFSM)	*1.67		*1.73		*24.30	
ANNUAL RUNOFF (IN)	*22.78		*23.46		369	
10 PERCENT EXCEEDS	431		396		76	
50 PERCENT EXCEEDS	46		55		13	
90 PERCENT EXCEEDS	14		14			

See Period of Record and Remarks. Values shown on this page are unadjusted for diversion, unless otherwise noted

* Adjusted to account for diversion, see Remarks

a Mar. 16 to Mar. 31

b From Jan. 23 to Feb. 3, and Feb. 26 to Mar. 15

c No flow during one or more days in water years 1956, 1960, 1969, and 1971

f Site and datum then in use

g Current site and datum

15276000 SHIP CREEK NEAR ANCHORAGE--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	638	e130	e95	e65	e32	e24	27	83	432	e400	e110	104
2	584	e120	e95	e70	e34	e24	28	96	430	479	e110	99
3	495	e130	e95	e75	e36	e24	29	103	458	458	e110	93
4	453	e150	e90	e75	e40	e24	28	90	497	419	e110	88
5	510	e140	e90	e70	e46	e24	30	84	615	392	e110	83
6	434	e130	e90	e70	e48	e24	30	91	698	356	e110	78
7	312	e120	e90	e65	e46	e24	31	92	682	319	e110	77
8	321	e140	e85	e65	e42	e24	29	88	649	322	e100	78
9	393	e160	e85	e60	e40	e24	27	87	625	339	e100	81
10	397	e140	e85	e60	e38	e24	27	102	624	314	e100	93
11	333	e120	e85	e50	e34	e24	29	119	597	290	e110	134
12	395	e120	e80	e55	e32	e24	28	143	605	277	e100	113
13	387	e120	e80	e55	e30	e24	26	e140	615	272	112	107
14	378	e110	e80	e55	e28	e24	27	e160	709	260	107	116
15	363	e100	e80	e50	e30	e24	25	e180	880	262	104	124
16	341	e100	e80	e48	e26	e24	30	e220	993	265	97	116
17	341	e100	e75	e46	e26	e22	28	e260	833	242	92	110
18	300	e110	e75	e44	e26	e22	24	e220	714	246	92	129
19	275	e110	e75	e42	e26	e22	28	e240	645	232	89	115
20	250	e120	e70	e38	e26	e22	32	e220	540	187	92	119
21	232	e120	e70	e34	e26	e22	42	e220	570	209	98	116
22	217	e130	e70	e30	e24	e22	49	e200	641	215	92	115
23	187	e140	e65	e26	e24	e22	55	e220	538	187	82	122
24	190	e120	e65	e26	e24	e22	58	e240	537	166	79	116
25	198	e110	e65	e26	e24	e22	70	e220	545	133	106	110
26	e180	e100	e60	e26	e24	e22	75	e220	e550	e120	99	116
27	e160	e100	e60	e26	e24	e22	89	e220	e450	e120	126	108
28	e130	e100	e60	e28	e24	e22	85	e280	e400	e120	143	101
29	e150	e95	e60	e28	---	e22	84	e360	e400	e110	124	97
30	e170	e95	e60	e30	---	e24	85	385	e380	e120	115	93
31	e150	---	e60	e30	---	e26	---	389	---	e120	109	---
TOTAL	9864	3580	2375	1468	880	720	1255	5772	17852	7951	3238	3151
MEAN	318	119	76.6	47.4	31.4	23.2	41.8	186	595	256	104	105
MAX	638	160	95	75	48	26	89	389	993	479	143	134
MIN	130	95	60	26	24	22	24	83	380	110	79	77
AC-FT	19570	7100	4710	2910	1750	1430	2490	11450	35410	15770	6420	6250

ADJUSTED TO INCLUDE DIVERSION

MEAN	345	143	91.1	65.2	46.2	40.4	60.6	204	617	286	133	127
CFM	3.82	1.58	1.01	0.72	0.51	0.45	0.67	2.25	6.81	3.16	1.47	1.41
IN	4.40	1.76	1.16	0.83	0.53	0.51	0.75	2.60	7.60	3.64	1.70	1.57
AC-FT	21240	8510	5600	4010	2570	2480	3610	12530	36700	17590	8190	7580

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1994, BY WATER YEAR (WY)#

MEAN	154	79.0	46.8	29.9	20.7	15.3	23.2	161	449	312	215	213
MAX	318	177	107	79.3	54.6	42.1	69.7	456	798	645	510	471
(WY)	1994	1953	1948	1961	1961	1947	1990	1990	1977	1980	1981	1967
MIN	48.7	24.3	13.9	7.13	5.36	3.61	4.77	39.9	224	128	85.3	55.8
(WY)	1969	1969	1969	1956	1983	1956	1954	1971	1954	1954	1990	1969

See Period of Record and Remarks. Values shown on this page are unadjusted for diversion,
unless otherwise noted
e Estimated

15276000 SHIP CREEK NEAR ANCHORAGE--Continued

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1947 - 1994#	
ANNUAL TOTAL	60031		58106			
ANNUAL MEAN	164		159		144	
ANNUAL MEAN	*187		*180		*163	
HIGHEST ANNUAL MEAN					223	1980
LOWEST ANNUAL MEAN					67.3	1969
HIGHEST DAILY MEAN	850	Jun 1	993	Jun 16	1420	Aug 9 1971
LOWEST DAILY MEAN	a13	Jan 23	b22	Mar 17	c.00	Jan 2 1956
ANNUAL SEVEN-DAY MINIMUM	13	Jan 23	22	Mar 17	.43	Jan 9 1956
MAXIMUM PEAK FLOW			1100	Jun 16	1860	Jun 21 1949
MAXIMUM PEAK STAGE			6.25	Jun 16	d3.44	Jun 21 1949
MAXIMUM PEAK STAGE					f6.38	Aug 27 1989
ANNUAL RUNOFF (AC-FT)	119100		115300		104000	
ANNUAL RUNOFF (AC-FT)	*135800		*130600		*118100	
ANNUAL RUNOFF (CFSM)	*2.07		*1.99		*1.80	
ANNUAL RUNOFF (IN)	*28.13		*27.06		*24.46	
10 PERCENT EXCEEDS	417		408		370	
50 PERCENT EXCEEDS	100		100		78	
90 PERCENT EXCEEDS	14		24		13	

See Period of Record and Remarks. Values shown on this page are unadjusted for diversion, unless otherwise noted

* Adjusted to account for diversion, see Remarks

a From Jan. 23 to Feb. 3, and Feb. 26 to Mar. 15

b Mar. 17 to 29

c No flow during one or more days in water years 1956, 1960, 1969, and 1971

d Site and datum then in use

f Current site and datum

15276000 SHIP CREEK NEAR ANCHORAGE--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	e55	e55	e48	e28	e24	29	112	366	440	201	144
2	89	e60	e55	e46	e34	e24	29	130	350	416	192	147
3	90	e60	e55	e38	e34	e22	30	159	346	439	194	139
4	96	e60	e55	e36	e34	e22	32	164	362	411	199	133
5	90	e60	e55	e36	e34	e22	31	168	373	415	199	144
6	93	e55	e50	e36	e34	e22	30	146	379	421	193	144
7	91	e55	e50	e34	e32	e22	31	140	372	442	183	141
8	87	e55	e50	e36	e32	e22	30	168	392	405	163	158
9	89	e55	e50	e42	e30	e22	32	226	437	343	159	169
10	97	e55	e50	e42	e30	e22	31	312	558	315	159	168
11	101	e55	e50	e42	e28	e22	31	347	749	313	149	159
12	105	e55	e50	e42	e28	e22	33	383	874	299	155	168
13	99	e55	e50	e42	e28	e24	34	428	903	287	157	171
14	91	e55	e50	e42	e28	e24	35	397	860	279	145	161
15	74	e55	e50	e42	e28	e24	35	403	731	254	139	152
16	81	e55	e50	e42	e28	e24	34	382	618	234	132	151
17	77	e55	e50	e42	e28	e24	35	353	531	220	127	139
18	68	e55	e50	e40	e28	e24	36	341	516	215	123	137
19	64	e55	e50	e40	e26	e24	34	334	556	209	122	138
20	61	e55	e50	e42	e26	e24	36	337	553	200	120	641
21	55	e55	e50	e42	e26	e26	38	367	490	203	114	1220
22	e55	e55	e50	e40	e26	e26	41	379	470	243	114	926
23	e55	e55	e50	e40	e26	e26	55	427	529	223	109	675
24	e60	e55	e50	e36	e26	e26	69	509	478	238	111	532
25	e65	e55	e50	e38	e26	e26	76	611	422	284	110	448
26	e60	e55	e50	e38	e24	e26	78	621	379	279	106	363
27	e60	e55	e48	e38	e24	e26	80	539	353	247	105	320
28	e60	e55	e48	e36	e24	e26	82	487	358	228	108	287
29	e60	e55	e48	e36	---	e26	88	462	383	220	95	259
30	e55	e55	e48	e36	---	e28	96	418	415	246	107	275
31	e55	---	e48	e34	---	29	---	389	---	217	108	---
TOTAL	2373	1670	1565	1224	800	751	1351	10639	15103	9185	4398	8809
MEAN	76.5	55.7	50.5	39.5	28.6	24.2	45.0	343	503	296	142	294
MAX	105	60	55	48	34	29	96	621	903	442	201	1220
MIN	55	55	48	34	24	22	29	112	346	200	95	133
AC-FT	4710	3310	3100	2430	1590	1490	2680	21100	29960	18220	8720	17470

ADJUSTED TO INCLUDE DIVERSION

MEAN	101	73.1	65.3	54.4	41.2	34.3	49.6	351	532	326	169	311
CFM	1.11	0.81	0.72	0.60	0.46	0.38	0.55	3.88	5.88	3.60	1.87	3.44
IN	1.28	0.90	0.83	0.69	0.47	0.44	0.61	4.48	6.56	4.15	2.16	3.84
AC-FT	6180	4350	4010	3340	2290	2110	2950	21600	31660	20030	10410	18530

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1995, BY WATER YEAR (WY)#

MEAN	152	78.6	46.8	30.1	20.9	15.5	23.6	165	450	311	213	214
MAX	318	177	107	79.3	54.6	42.1	69.7	456	798	645	510	471
(WY)	1994	1953	1948	1961	1961	1947	1990	1990	1977	1980	1981	1967
MIN	48.7	24.3	13.9	7.13	5.36	3.61	4.77	39.9	224	128	85.3	55.8
(WY)	1969	1969	1969	1956	1983	1956	1954	1971	1954	1954	1990	1969

See Period of Record and Remarks. Values shown on this page are unadjusted for diversion,
unless otherwise noted
e Estimated

15276000 SHIP CREEK NEAR ANCHORAGE--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1947 - 1995#	
ANNUAL TOTAL	47895		57868		144	
ANNUAL MEAN	131		159		*163	
ANNUAL MEAN	*152		*176		223	1980
HIGHEST ANNUAL MEAN					67.3	1969
LOWEST ANNUAL MEAN					1420	Aug 9 1971
HIGHEST DAILY MEAN	993	Jun 16	1220	Sep 21	c.00	Jan 2 1956
LOWEST DAILY MEAN	a22	Mar 17	b22	Mar 3	.43	Jan 9 1956
ANNUAL SEVEN-DAY MINIMUM	22	Mar 17	22	Mar 3	1860	Jun 21 1949
MAXIMUM PEAK FLOW			1440	Sep 21	d3.44	Jun 21 1949
MAXIMUM PEAK STAGE			6.52	Sep 21	f6.52	Sep 21 1995
MAXIMUM PEAK STAGE					104200	
ANNUAL RUNOFF (AC-FT)	95000		114800		*118100	
ANNUAL RUNOFF (AC-FT)	*109800		*127500		*1.80	
ANNUAL RUNOFF (CFSM)	*1.67		*1.94		*24.46	
ANNUAL RUNOFF (IN)	*22.75		*26.41		372	
10 PERCENT EXCEEDS	382		417		77	
50 PERCENT EXCEEDS	65		60		14	
90 PERCENT EXCEEDS	24		26			

See Period of Record and Remarks. Values shown on this page are unadjusted for diversion, unless otherwise noted

* Adjusted to account for diversion, see Remarks

a Mar. 17 to 29

b Mar. 3 to 12

c No flow during one or more days in water years 1956, 1960, 1969, and 1971

d Site and datum then in use

f Current site and datum

15276000 SHIP CREEK NEAR ANCHORAGE--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	236	e85	e55	e44	e34	e26	e20	51	194	90	86	70
2	221	e85	e55	e44	e34	e26	e20	51	221	85	89	63
3	210	e80	e55	e44	e34	e26	e20	51	227	88	80	62
4	195	e80	e55	e44	e34	e26	e20	60	236	86	74	59
5	175	e80	e55	e44	e34	e26	e20	83	215	84	82	56
6	162	e80	e55	e42	e34	e26	e20	98	184	85	86	53
7	148	e75	e55	e42	e32	e26	e20	108	165	80	82	51
8	147	e75	e55	e42	e32	e26	e20	118	164	72	76	54
9	175	e75	e50	e42	e32	e24	e22	123	146	74	73	49
10	182	e75	e50	e42	e32	e24	e24	113	132	69	91	50
11	170	e70	e50	e42	e32	e24	e26	125	133	68	87	48
12	174	e70	e50	e40	e32	e24	e28	139	114	67	82	52
13	150	e70	e50	e40	e32	e24	32	164	109	71	77	54
14	136	e70	e50	e40	e30	e24	31	188	107	83	72	53
15	139	e70	e50	e40	e30	e24	32	e160	104	72	70	60
16	130	e65	e50	e40	e30	e24	33	e150	102	71	72	65
17	122	e65	e50	e40	e30	e22	34	e140	104	65	76	80
18	e110	e65	e50	e38	e30	e22	36	e130	104	67	70	145
19	e110	e65	e50	e38	e30	e22	38	e130	102	67	67	133
20	e110	e65	e50	e38	e30	e22	40	e120	99	68	68	120
21	e110	e60	e48	e38	e28	e22	41	e110	98	66	65	134
22	e100	e60	e48	e38	e28	e22	40	e100	98	64	63	117
23	e100	e60	e48	e38	e28	e22	40	130	99	62	61	103
24	e100	e60	e48	e36	e28	e22	42	121	110	61	60	97
25	e100	e60	e48	e36	e28	e22	44	127	105	63	61	116
26	e90	e60	e46	e36	e28	e22	48	125	102	55	76	112
27	e90	e60	e46	e36	e28	e22	48	134	98	61	64	107
28	e90	e55	e46	e36	e26	e22	44	135	91	59	60	105
29	e90	e55	e46	e36	e26	e22	43	130	90	60	62	100
30	e90	e55	e46	e34	---	e22	44	152	92	92	65	90
31	e85	---	e44	e34	---	e22	---	168	---	78	67	---
TOTAL	4247	2050	1554	1224	886	730	970	3734	3945	2233	2264	2458
MEAN	137	68.3	50.1	39.5	30.6	23.5	32.3	120	132	72.0	73.0	81.9
MAX	236	85	55	44	34	26	48	188	236	92	91	145
MIN	85	55	44	34	26	22	20	51	90	55	60	48
AC-FT	8420	4070	3080	2430	1760	1450	1920	7410	7820	4430	4490	4880

ADJUSTED TO INCLUDE DIVERSION

MEAN	152	92.9	67.3	47.3	36.7	31.1	39.0	128	154	100	102	110
CFM	1.68	1.03	0.74	0.52	0.41	0.34	0.43	1.42	1.70	1.10	1.12	1.21
IN	1.94	1.14	0.86	0.60	0.44	0.40	0.48	1.63	1.90	1.27	1.29	1.36
AC-FT	9370	5530	4140	2900	2110	1910	2320	7880	9160	6150	6240	6540

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1996, BY WATER YEAR (WY)#

MEAN	152	78.4	46.9	30.3	21.1	15.7	23.8	164	444	307	211	212
MAX	318	177	107	79.3	54.6	42.1	69.7	456	798	645	510	471
(WY)	1994	1953	1948	1961	1961	1947	1990	1990	1977	1980	1981	1967
MIN	48.7	24.3	13.9	7.13	5.36	3.61	4.77	39.9	132	72.0	73.0	55.8
(WY)	1969	1969	1969	1956	1983	1956	1954	1971	1996	1996	1996	1969

See Period of Record and Remarks. Values shown on this page are unadjusted for diversion,
unless otherwise noted
e Estimated

15276000 SHIP CREEK NEAR ANCHORAGE--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1947 - 1996#	
ANNUAL TOTAL	60111		26295			
ANNUAL MEAN	165		71.8		142	
ANNUAL MEAN	*182		*88.3		*161	
HIGHEST ANNUAL MEAN					223	1980
LOWEST ANNUAL MEAN					67.3	1969
HIGHEST DAILY MEAN	1220	Sep 21	236	Oct 1	1420	Aug 9 1971
LOWEST DAILY MEAN	a22	Mar 3	b20	Apr 1	c.00	Jan 2 1956
ANNUAL SEVEN-DAY MINIMUM	22	Mar 3	20	Apr 1	.43	Jan 9 1956
MAXIMUM PEAK FLOW			375	Sep 20	1860	Jun 21 1949
MAXIMUM PEAK STAGE			d5.54	Jun 25	f3.44	Jun 21 1949
MAXIMUM PEAK STAGE					g6.52	Sep 21 1995
ANNUAL RUNOFF (AC-FT)	119200		52160		103200	
ANNUAL RUNOFF (AC-FT)	*132000		*64300		*116600	
ANNUAL RUNOFF (CFSM)	*2.01		*0.98		*1.78	
ANNUAL RUNOFF (IN)	*27.34		*13.31		*24.16	
10 PERCENT EXCEEDS	417		133		369	
50 PERCENT EXCEEDS	90		60		76	
90 PERCENT EXCEEDS	26		26		14	

See Period of Record and Remarks. Values shown on this page are unadjusted for diversion, unless otherwise noted

* Adjusted to account for diversion, see Remarks

a Mar. 3 to 12

b Apr. 1 to 8

c No flow during one or more days in water years 1956, 1960, 1969, and 1971

d Jun. 25 and Sep. 20

f Site and datum then in use

g Current site and datum

15276000 SHIP CREEK NEAR ANCHORAGE--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	e55	e38	e30	e26	e13	e24	70	476	301	110	512
2	73	e55	e38	e30	e26	e13	e24	79	448	277	109	417
3	75	e55	e38	e28	e26	e14	e24	85	445	259	102	353
4	71	e55	e38	e28	e26	e14	e25	98	489	238	93	314
5	69	e55	e36	e28	e26	e14	e25	109	561	235	92	287
6	66	e55	e36	e28	e26	e14	e25	126	584	227	99	258
7	65	e55	e36	e32	e26	e14	e25	158	555	209	96	240
8	64	e50	e36	e32	e24	e14	e25	157	515	200	103	228
9	74	e50	e36	e32	e24	e14	e25	163	469	188	108	236
10	69	e50	e36	e32	e24	e14	e26	171	440	177	131	237
11	66	e50	e36	e32	e24	e15	e26	177	410	200	147	218
12	e75	e50	e36	e32	e22	e15	e26	204	410	199	190	203
13	e70	e50	e36	e32	e22	e15	e26	207	403	189	254	192
14	e65	e50	e36	e32	e22	e15	e26	202	390	180	234	183
15	e65	e48	e36	e32	e22	e15	e26	188	364	181	202	173
16	e60	e48	e36	e32	e20	e15	e26	176	341	179	191	167
17	e60	e48	e36	e30	e20	e16	e27	204	322	167	167	175
18	e55	e46	e36	e28	e20	e16	e27	200	324	159	147	212
19	e55	e46	e36	e28	e19	e17	e27	195	330	151	131	204
20	e55	e44	e34	e28	e19	e17	e28	215	337	147	124	186
21	e55	e44	e34	e28	e18	e18	e28	273	305	146	142	178
22	e55	e44	e34	e28	e18	e18	e28	330	323	141	191	225
23	e55	e42	e34	e28	e18	e19	e30	361	363	136	159	281
24	e55	e42	e34	e24	e18	e19	e32	408	390	124	146	316
25	e48	e42	e34	e24	e18	e20	e34	424	385	140	144	332
26	e48	e40	e34	e24	e18	e20	e38	467	384	137	186	294
27	e50	e40	e32	e24	e17	e22	e44	479	370	131	184	270
28	e50	e40	e32	e26	e15	e22	e50	494	373	115	167	248
29	e55	e38	e32	e26	---	e22	e60	512	356	114	160	221
30	e55	e38	e30	e26	---	e22	60	523	329	114	161	212
31	e55	---	e30	e26	---	e22	---	531	---	115	398	---
TOTAL	1914	1425	1086	890	604	518	917	7986	12191	5476	4868	7572
MEAN	61.7	47.5	35.0	28.7	21.6	16.7	30.6	258	406	177	157	252
MAX	81	55	38	32	26	22	60	531	584	301	398	512
MIN	48	38	30	24	15	13	24	70	305	114	92	167
AC-FT	3800	2830	2150	1770	1200	1030	1820	15840	24180	10860	9660	15020

ADJUSTED TO INCLUDE DIVERSION

MEAN	79.1	59.1	46.3	40.2	33.4	26.6	40.0	272	416	189	170	259
CFM	0.87	0.65	0.51	0.44	0.37	0.29	0.44	3.01	4.59	2.08	1.88	2.86
IN	1.01	0.73	0.59	0.51	0.38	0.34	0.49	3.46	5.12	2.40	2.17	3.20
AC-FT	4870	3520	2850	2470	1860	1630	2380	16730	24730	11600	10470	15430

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1997, BY WATER YEAR (WY)#

MEAN	150	77.8	46.7	30.3	21.1	15.7	23.9	166	443	304	210	212
MAX	318	177	107	79.3	54.6	42.1	69.7	456	798	645	510	471
(WY)	1994	1953	1948	1961	1961	1947	1990	1990	1977	1980	1981	1967
MIN	48.7	24.3	13.9	7.13	5.36	3.61	4.77	39.9	132	72.0	73.0	55.8
(WY)	1969	1969	1969	1956	1983	1956	1954	1971	1996	1996	1996	1969

See Period of Record and Remarks. Values shown on this page are unadjusted for diversion,
unless otherwise noted
e Estimated

15276000 SHIP CREEK NEAR ANCHORAGE--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1947 - 1997#	
ANNUAL TOTAL	22869		45447			
ANNUAL MEAN	62.5		125		142	
ANNUAL MEAN	*77.7		*136		*161	
HIGHEST ANNUAL MEAN					223	1980
LOWEST ANNUAL MEAN					67.3	1969
HIGHEST DAILY MEAN	236	Jun 4	584	Jun 6	1420	Aug 9 1971
LOWEST DAILY MEAN	a20	Apr 1	b13	Mar 1	c.00	Jan 2 1956
ANNUAL SEVEN-DAY MINIMUM	20	Apr 1	14	Mar 1	.43	Jan 9 1956
MAXIMUM PEAK FLOW			665	Jun 5	1860	Jun 21 1949
MAXIMUM PEAK STAGE			5.80	Jun 5	d3.44	Jun 21 1949
MAXIMUM PEAK STAGE					f6.52	Sep 21 1995
ANNUAL RUNOFF (AC-FT)	45360		90140		102900	
ANNUAL RUNOFF (AC-FT)	*56500		*98500		*116600	
ANNUAL RUNOFF (CFSM)	*0.86		*1.50		*1.78	
ANNUAL RUNOFF (IN)	*11.70		*20.41		*24.16	
10 PERCENT EXCEEDS	117		339		368	
50 PERCENT EXCEEDS	51		55		75	
90 PERCENT EXCEEDS	26		20		14	

See Period of Record and Remarks. Values shown on this page are unadjusted for diversion, unless otherwise noted

* Adjusted to account for diversion, see Remarks

a Apr. 1 to 8

b Mar. 1 and 2

c No flow during one or more days in water years 1956, 1960, 1969, and 1971

d Site and datum then in use

f Current site and datum

15276000 SHIP CREEK NEAR ANCHORAGE--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e234	e90	e60	e46	e38	32	32	52	460	560	228	208
2	219	e85	e60	e48	e38	32	29	46	526	526	220	193
3	209	e85	e60	e46	e38	33	28	45	604	526	223	206
4	199	e80	e60	e46	e38	e32	29	42	637	505	235	215
5	201	e80	e55	e46	e36	e32	27	40	641	567	221	282
6	193	e75	e55	e46	e36	32	28	40	615	541	206	265
7	184	e75	e55	e44	e36	31	27	43	588	519	194	253
8	179	e70	e50	e44	e36	31	28	49	584	523	189	238
9	165	e76	e50	e44	e36	31	28	53	593	482	183	216
10	160	e85	e47	e42	e36	31	28	50	636	447	175	202
11	157	e91	e61	e42	e36	32	28	56	667	428	166	192
12	152	e72	e55	e42	e36	32	29	60	656	396	157	186
13	149	e72	e50	e42	e36	32	29	66	641	378	153	180
14	151	e71	e50	e44	e36	31	29	77	625	358	154	169
15	147	e70	e50	e44	e36	30	30	95	703	346	154	159
16	141	e72	e50	e42	e36	30	30	108	792	337	151	154
17	137	e68	e50	e42	e36	30	30	114	819	331	150	149
18	132	e67	e48	e40	e36	e30	31	138	826	324	153	147
19	129	e67	e46	e40	e36	e30	32	152	781	349	146	154
20	121	e69	e48	e40	e36	32	34	179	757	446	178	147
21	e110	e69	e48	e40	35	33	35	189	766	430	166	143
22	122	e66	e46	e40	34	33	37	181	751	381	155	139
23	120	e64	e46	e42	e34	e34	39	183	783	345	146	136
24	114	e70	e46	e40	e34	e34	38	190	804	319	145	139
25	116	e65	e50	e42	e34	e36	40	189	766	302	136	132
26	e109	e65	e46	e42	e34	e36	40	188	765	285	129	127
27	e95	e65	e50	e40	e34	e38	46	204	759	267	123	124
28	e95	e73	e60	e40	e32	37	49	244	780	252	144	121
29	e90	e80	e70	e40	---	29	48	321	710	239	287	118
30	e100	e70	e55	e38	---	28	51	404	639	237	240	115
31	e90	---	e48	e38	---	28	---	436	---	240	220	---
TOTAL	4520	2207	1625	1312	999	992	1009	4234	20674	12186	5527	5209
MEAN	146	73.6	52.4	42.3	35.7	32.0	33.6	137	689	393	178	174
MAX	234	91	70	48	38	38	51	436	826	567	287	282
MIN	90	64	46	38	32	28	27	40	460	237	123	115
AC-FT	8970	4380	3220	2600	1980	1970	2000	8400	41010	24170	10960	10330

ADJUSTED TO INCLUDE DIVERSION

MEAN	152	79.8	58.9	48.6	42.3	38.1	39.5	143	697	403	204	180
CFSM	1.68	0.88	0.65	0.54	0.47	0.42	0.44	1.58	7.70	4.46	2.26	1.99
IN	1.94	0.98	0.75	0.62	0.49	0.49	0.49	1.82	8.59	5.14	2.60	2.22
AC-FT	9340	4750	3620	2990	2350	2340	2350	8770	41470	24810	12560	10700

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2001, BY WATER YEAR (WY)#

MEAN	149	77.6	47.2	31.1	22.1	16.6	24.8	165	455	308	209	211
MAX	318	177	107	79.3	54.6	42.1	69.7	456	798	645	510	471
(WY)	1994	1953	1948	1961	1961	1947	1990	1990	1977	1980	1981	1967
MIN	48.7	24.3	13.9	7.13	5.36	3.61	4.77	39.9	132	72.0	73.0	55.8
(WY)	1969	1969	1969	1956	1983	1956	1954	1971	1996	1996	1996	1969

See Period of Record and Remarks. Values shown on this page are unadjusted for diversion,
unless otherwise noted
e Estimated

15276000 SHIP CREEK NEAR ANCHORAGE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1947 - 2001#	
ANNUAL TOTAL	66756		60494		143	
ANNUAL MEAN	182		166		*162	
ANNUAL MEAN	*191		*174		223	1980
HIGHEST ANNUAL MEAN					67.3	1969
LOWEST ANNUAL MEAN					1420	Aug 9 1971
HIGHEST DAILY MEAN	880	Jun 8	826	Jun 18	b.00	Jan 2 1956
LOWEST DAILY MEAN	27	Apr 1	a27	Apr 5	.43	Jan 9 1956
ANNUAL SEVEN-DAY MINIMUM	28	Mar 26	28	Apr 5	1860	Jun 21 1949
MAXIMUM PEAK FLOW			891	Jun 18	c3.44	Jun 21 1949
MAXIMUM PEAK STAGE			6.05	Jun 18	d6.52	Sep 21 1995
MAXIMUM PEAK STAGE					103900	
ANNUAL RUNOFF (AC-FT)	132400		120000		*117400	
ANNUAL RUNOFF (AC-FT)	*139000		*126100			
ANNUAL RUNOFF (CFSM)	*2.12		*1.92		*1.79	
ANNUAL RUNOFF (IN)	*28.80		*26.12		*24.30	
10 PERCENT EXCEEDS	528		511		369	
50 PERCENT EXCEEDS	84		73		76	
90 PERCENT EXCEEDS	32		32		14	

See Period of Record and Remarks. Values shown on this page are unadjusted for diversion, unless otherwise noted

* Adjusted to account for diversion, see Remarks

a Apr. 5 and Apr. 7

b No flow during one or more days in water years 1956, 1960, 1969, and 1971

c Site and datum then in use

d Current site and datum

15278000 EKLUTNA LAKE NEAR PALMER

LOCATION.--Lat 61°24'39", long 149°07'20", in NE¹/₄ NE¹/₄ sec. 18, T. 15 N., R. 2 E. (Anchorage B-6 quad), Municipality of Anchorage, Hydrologic Unit 19020402, on north shore, 0.7 mi upstream from lake outlet, 12 mi upstream from mouth of Eklutna River, and 14 mi south of Palmer.

DRAINAGE AREA.--119 mi².

PERIOD OF RECORD.--November 1946 to September 1962 (fragmentary after January 1955), June 1983 to current year. Fragmentary records for the period October 1962 to June 1983 available from Eklutna Hydroelectric Project.

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by Alaska Power Administration). Prior to June 1983, non-recording gage at lake outlet at datum of 859.8 ft above sea level.

REMARKS.--Lake outlet consists of earth and rockfill dam with uncontrolled spillway crest at an elevation of 871 ft. Prior to 1965, control structure 1400 ft upstream with spillway crest at elevation of 867.5 ft which could be flash-boarded to elevation of 871 ft. Outflow was controlled by the flash boards and sluice gates. Dead storage below elevation of 859 ft. Reservoir is used for power generation and water supply. GOES satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 877.68 ft, September 25, 1995; minimum observed, 814.2 ft, June 1, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 867.94 ft, September 8; minimum, 821.82 ft, May 15,16,19, and 20.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	851.62	850.17	846.62	842.66	839.06	834.64	829.01	824.13	822.87	834.37	854.78	867.13
2	851.67	850.08	846.48	842.54	838.94	834.48	828.84	824.06	823.05	835.20	855.34	867.19
3	851.67	849.97	846.33	842.43	838.81	834.35	828.67	824.03	823.16	836.00	855.93	867.38
4	851.70	849.85	846.18	842.30	838.67	834.18	828.52	823.91	823.14	836.76	856.43	867.54
5	851.75	849.68	846.08	842.14	838.48	833.99	828.28	823.72	823.12	837.49	856.91	867.74
6	851.85	849.51	845.98	842.00	838.34	833.84	828.04	823.54	823.21	838.23	857.37	867.86
7	851.89	849.37	845.86	841.95	838.21	833.68	827.87	823.34	823.29	838.91	857.81	867.89
8	851.88	849.24	845.70	841.86	838.08	833.53	827.72	823.16	823.35	839.62	858.25	867.91
9	851.85	849.15	845.54	841.72	837.96	833.37	827.59	822.98	823.45	840.32	858.71	867.89
10	851.83	849.06	845.42	841.62	837.82	833.18	827.41	822.80	823.56	840.98	859.07	867.86
11	851.83	848.97	845.30	841.50	837.68	832.98	827.25	822.64	823.67	841.61	859.32	867.82
12	851.81	848.85	845.18	841.36	837.50	832.80	827.09	822.49	823.80	842.14	859.62	867.81
13	851.79	848.74	845.08	841.23	837.36	832.62	826.92	822.17	823.88	842.62	859.96	867.78
14	851.77	848.61	844.94	841.10	837.21	832.36	826.73	821.91	823.91	843.07	860.41	867.71
15	851.72	848.49	844.81	841.01	837.04	832.18	826.57	821.84	823.92	843.49	860.96	867.68
16	851.66	848.36	844.71	840.93	836.88	831.99	826.46	821.84	824.11	843.92	861.48	867.70
17	851.62	848.26	844.54	840.85	836.73	831.79	826.37	821.85	824.40	844.38	861.93	867.70
18	851.56	848.17	844.48	840.78	836.57	831.56	826.25	821.85	824.74	844.90	862.37	867.67
19	851.49	848.09	844.35	840.72	836.35	831.34	826.11	821.85	825.18	845.52	862.81	867.64
20	851.42	848.00	844.24	840.60	836.17	831.14	826.02	821.86	825.72	846.43	863.33	867.63
21	851.35	847.90	844.09	840.48	835.98	830.97	825.86	821.87	826.29	847.44	863.77	867.60
22	851.27	847.79	843.96	840.33	835.82	830.80	825.63	821.91	826.81	848.35	864.08	867.58
23	851.18	847.66	843.89	840.21	835.67	830.61	825.50	821.92	827.39	849.18	864.29	867.61
24	851.07	847.51	843.74	840.08	835.51	830.45	825.36	821.95	828.13	849.91	864.51	867.64
25	850.98	847.38	843.60	839.93	835.29	830.25	825.18	822.00	828.97	850.59	864.73	867.59
26	850.92	847.26	843.43	839.79	835.10	830.02	824.95	822.03	829.75	851.24	864.90	867.52
27	850.83	847.11	843.28	839.67	834.97	829.81	824.74	822.05	830.59	851.90	865.04	867.45
28	850.71	847.00	843.11	839.58	834.80	829.58	824.54	822.09	831.59	852.48	865.28	867.37
29	850.57	846.86	843.00	839.43	---	829.41	824.35	822.20	832.58	853.05	866.12	867.29
30	850.45	846.73	842.96	839.29	---	829.29	824.19	822.42	833.52	853.64	866.72	867.19
31	850.30	---	842.82	839.16	---	829.15	---	822.65	---	854.26	867.02	---
MEAN	851.42	848.46	844.70	840.94	837.04	831.95	826.60	822.55	825.71	844.45	861.27	867.61
MAX	851.89	850.17	846.62	842.66	839.06	834.64	829.01	824.13	833.52	854.26	867.02	867.91
MIN	850.30	846.73	842.82	839.16	834.80	829.15	824.19	821.84	822.87	834.37	854.78	867.13

15281000 KNIK RIVER NEAR PALMER

LOCATION.--Lat 61°30'18", long 149°01'50", in NE¹/₄ SE¹/₄ sec. 2, T.16 N., R.2 E. (Anchorage C-6 quad), Matanuska-Susitna Borough, Hydrologic Unit 19020402, near the right bank on downstream side of bridge on Old Glenn Highway, 7 mi south of Palmer, 7 mi upstream from Alaska Railroad bridge, 9 mi downstream from Friday Creek, and about 17 mi downstream from Knik Glacier.

DRAINAGE AREA.--1,180 mi², approximately.

PERIOD OF RECORD.--October 1959 to January 1988, annual maximum, water year 1989, October 1991 to September 1992, and April to September, 2001.

REVISED RECORDS.--WRD-AK-77-1: 1974-75(M).

GAGE.--Water-stage recorder and crest stage gage. Datum of gage is 27.51 ft above National Geodetic Vertical Datum of 1929 (surveys show a correction of -2.69 ft needed after earthquake of Mar. 27, 1964. Correction used beginning in 1985) Prior to June 27, 1960, nonrecording gage, and June 27, 1960 to Apr. 25, 1974, water-stage recorder at old bridge 100 ft upstream at original 1929 datum. Apr. 26, 1974 to Apr. 18, 1976, recording gage at site 0.4 mi upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flood peaks due to outbreak of glacier-dammed Lake George, 1948-62, 1964, 1965, published in WSP 1936. Streamflow augmented by glaciers, which cover 54 percent of the basin.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1948, 359,000 ft³/s, July 18, 1958, gage height, 25.30 ft, at site in use beginning 1959, from outbreak of glacier-dammed Lake George.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	e1200	1950	7390	27400	22600	22200
2	---	---	---	---	---	---	e1200	1910	8020	26600	23300	18800
3	---	---	---	---	---	---	e1200	1880	9080	26900	24700	17800
4	---	---	---	---	---	---	e1200	1790	10100	25900	23100	17900
5	---	---	---	---	---	---	1100	1650	10000	24200	22200	19200
6	---	---	---	---	---	---	1040	1540	9860	22200	21600	17400
7	---	---	---	---	---	---	1090	1530	9340	20900	21700	14600
8	---	---	---	---	---	---	1070	1530	9520	21100	22400	12600
9	---	---	---	---	---	---	1050	1610	11900	20500	22600	11400
10	---	---	---	---	---	---	1080	1720	12000	20900	21400	10700
11	---	---	---	---	---	---	1110	1790	12600	22100	20200	10300
12	---	---	---	---	---	---	1330	1850	12200	22000	20200	10100
13	---	---	---	---	---	---	1350	1920	12600	20200	21700	10900
14	---	---	---	---	---	---	1300	2050	11800	18100	25900	10900
15	---	---	---	---	---	---	1230	2310	12500	17800	28700	10600
16	---	---	---	---	---	---	1220	2820	14600	17900	31400	10000
17	---	---	---	---	---	---	1240	3150	17100	18300	29500	9820
18	---	---	---	---	---	---	1230	3220	20100	19300	27300	10200
19	---	---	---	---	---	---	1240	3280	21300	22100	25500	10300
20	---	---	---	---	---	---	1280	3630	22200	27100	26500	10400
21	---	---	---	---	---	---	1330	4290	22900	29900	28400	10600
22	---	---	---	---	---	---	1380	4450	23900	33000	28900	9860
23	---	---	---	---	---	---	1420	4320	25200	34200	26700	9070
24	---	---	---	---	---	---	1440	4340	27200	31900	24100	9180
25	---	---	---	---	---	---	1480	4520	28300	29300	21000	8820
26	---	---	---	---	---	---	1570	4590	28800	28100	19500	8070
27	---	---	---	---	---	---	1610	4380	30000	27400	18700	7410
28	---	---	---	---	---	---	1700	4660	30600	25800	19500	6640
29	---	---	---	---	---	---	1830	5620	31700	23900	27100	6320
30	---	---	---	---	---	---	1890	6720	31100	24000	29700	5970
31	---	---	---	---	---	---	---	7220	---	23200	27700	---
TOTAL	---	---	---	---	---	---	39410	98240	533910	752200	753800	348060
MEAN	---	---	---	---	---	---	1314	3169	17800	24260	24320	11600
MAX	---	---	---	---	---	---	1890	7220	31700	34200	31400	22200
MIN	---	---	---	---	---	---	1040	1530	7390	17800	18700	5970
AC-FT	---	---	---	---	---	---	78170	194900	1059000	1492000	1495000	690400
CFSM	---	---	---	---	---	---	1.11	2.69	15.1	20.6	20.6	9.83
IN.	---	---	---	---	---	---	1.24	3.10	16.83	23.71	23.76	10.97

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2001, BY WATER YEAR (WY)#

	4346	1773	956	865	727	644	911	3683	12670	23490	21370	11340
MEAN	4346	1773	956	865	727	644	911	3683	12670	23490	21370	11340
MAX	9419	4844	1932	3781	2464	1314	1534	7347	19960	37450	28300	16960
(WY)	1970	1965	1977	1981	1977	1977	1983	1981	1969	1960	1979	1974
MIN	1782	637	500	460	338	260	348	1039	2598	17440	15260	6594
(WY)	1982	1969	1974	1976	1962	1962	1972	1965	1965	1970	1969	1992

See Period of Record; partial years used in monthly statistics
e Estimated

15281000 KNIK RIVER NEAR PALMER--Continued

SUMMARY STATISTICS	FOR 2001 WATER YEAR		WATER YEARS 1960 - 2001#	
ANNUAL TOTAL			6981	
ANNUAL MEAN			13800	2001
HIGHEST ANNUAL MEAN			2286	1988
LOWEST ANNUAL MEAN			341000	Jul 26 1961
HIGHEST DAILY MEAN	34200	Jul 23	a260	Mar 1 1962
LOWEST DAILY MEAN			260	Mar 1 1962
ANNUAL SEVEN-DAY MINIMUM			bc355000	Jul 26 1961
MAXIMUM PEAK FLOW	35400	Jul 23	24.35	Jul 17 1960
MAXIMUM PEAK STAGE	12.21	Jul 23	5057000	
ANNUAL RUNOFF (AC-FT)			5.92	
ANNUAL RUNOFF (CFSM)			80.38	
ANNUAL RUNOFF (INCHES)			21100	
10 PERCENT EXCEEDS			2000	
50 PERCENT EXCEEDS			500	
90 PERCENT EXCEEDS				

See Period of Record; partial years used in monthly statistics

a Mar. 1-31, 1962

b Site then in use, caused by release of stored water (Lake George) behind Knik Glacier

c Gage height, 24.3 ft

15281500 CAMP CREEK NEAR SHEEP MOUNTAIN LODGE

LOCATION.--Lat 61°50'20", long 147°24'31", in SE¹/₄ SE¹/₄ NW¹/₄ sec. 11, T. 20 N., R. 11 E. (Anchorage D-2 quad), Matanuska-Susitna Borough, Hydrologic Unit 19020402, on left bank 5 ft downstream from culvert on old alignment (1/2 mile upstream from new alignment) Glenn Highway, and 3.5 mi northeast of Sheep Mountain Lodge.

DRAINAGE AREA.--1.09 mi²

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Annual maximum, water years 1968-69, 1971, 1989-95. October 1995 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 2,950 ft above sea level, from topographic map. Prior to 1971 crest-stage gage at site above culvert at different datum, June 2, 1989 to September 30, 1995, crest-stage gage at same site, and datum.

REMARKS.--Records are poor. Goes satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.9	e.00	e.00	e.00	e.00	e.00	e.00	e.00	5.1	5.1	.94	e.80
2	e1.8	e.00	e.00	e.00	e.00	e.00	e.00	e.00	6.7	4.8	e.92	e1.0
3	e1.7	e.00	e.00	e.00	e.00	e.00	e.00	e.00	7.6	4.5	e.90	e1.2
4	e1.6	e.00	e.00	e.00	e.00	e.00	e.00	e.00	8.7	4.3	e.90	e1.8
5	e1.5	e.00	e.00	e.00	e.00	e.00	e.00	e.00	9.5	4.3	e.90	e2.0
6	e1.3	e.00	e.00	e.00	e.00	e.00	e.00	e.00	9.0	4.9	e.90	e1.8
7	e1.0	e.00	e.00	e.00	e.00	e.00	e.00	e.00	9.9	5.8	e.88	e1.6
8	e.90	e.00	e.00	e.00	e.00	e.00	e.00	e.00	10	5.7	e.88	e.90
9	e.80	e.00	e.00	e.00	e.00	e.00	e.00	e.00	14	4.9	e.88	e.88
10	e.70	e.00	e.00	e.00	e.00	e.00	e.00	e.00	11	4.2	e.86	e.86
11	e.60	e.00	e.00	e.00	e.00	e.00	e.00	e.00	12	3.8	e.86	e.84
12	e.50	e.00	e.00	e.00	e.00	e.00	e.00	e.00	9.9	3.5	e.86	e.84
13	e.40	e.00	e.00	e.00	e.00	e.00	e.00	e.10	10	3.3	e.86	e.82
14	e.30	e.00	e.00	e.00	e.00	e.00	e.00	e.20	10	3.0	e.86	e.82
15	e.20	e.00	e.00	e.00	e.00	e.00	e.00	e.30	10	e2.8	e.86	e.82
16	e.20	e.00	e.00	e.00	e.00	e.00	e.00	e.40	9.6	e2.6	e.84	e.82
17	e.20	e.00	e.00	e.00	e.00	e.00	e.00	e.60	9.7	e2.5	e.84	e.80
18	e.20	e.00	e.00	e.00	e.00	e.00	e.00	e.80	8.2	2.3	e.84	e.80
19	e.10	e.00	e.00	e.00	e.00	e.00	e.00	e1.0	7.3	2.2	e.84	e.80
20	e.10	e.00	e.00	e.00	e.00	e.00	e.00	e1.2	8.6	1.9	e.84	e.80
21	e.10	e.00	e.00	e.00	e.00	e.00	e.00	e1.4	6.9	1.9	e.84	e.78
22	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e1.6	9.0	1.8	e.84	e.78
23	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e1.8	8.2	1.7	e.82	e.78
24	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e2.0	7.7	1.6	e.82	e.78
25	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e2.2	7.7	1.5	e.82	e.78
26	e.00	e.00	e.00	e.00	e.00	e.00	e.00	2.3	7.1	1.4	e.82	e.78
27	e.00	e.00	e.00	e.00	e.00	e.00	e.00	2.4	6.5	1.3	e.80	e.78
28	e.00	e.00	e.00	e.00	e.00	e.00	e.00	2.6	6.1	1.2	e.80	e.76
29	e.00	e.00	e.00	e.00	---	e.00	e.00	3.2	5.9	1.1	e.80	e.76
30	e.00	e.00	e.00	e.00	---	e.00	e.00	3.7	5.6	1.1	e.80	e.76
31	e.00	---	e.00	e.00	---	e.00	---	4.3	---	1.0	e.80	---
TOTAL	16.10	0.00	0.00	0.00	0.00	0.00	0.00	32.10	257.5	92.0	26.42	28.74
MEAN	.52	.000	.000	.000	.000	.000	.000	1.04	8.58	2.97	.85	.96
MAX	1.9	.00	.00	.00	.00	.00	.00	4.3	14	5.8	.94	2.0
MIN	.00	.00	.00	.00	.00	.00	.00	.00	5.1	1.0	.80	.76
AC-FT	32	.00	.00	.00	.00	.00	.00	64	511	182	52	57
CFSM	.48	.00	.00	.00	.00	.00	.00	.95	7.87	2.72	.78	.88
IN.	.55	.00	.00	.00	.00	.00	.00	1.10	8.79	3.14	.90	.98

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)#

	1996	1997	1998	1999	2000	2001
MEAN	.55	.27	.10	.010	.000	.000
MAX	1.12	.65	.39	.042	.000	.000
(WY)	1998	1998	1998	1999	1996	1996
MIN	.17	.000	.000	.000	.000	.000
(WY)	1997	2001	2001	1996	1996	1999

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1996 - 2001#
ANNUAL TOTAL	511.90	452.86	
ANNUAL MEAN	1.40	1.24	.92
HIGHEST ANNUAL MEAN			1.46
LOWEST ANNUAL MEAN			.26
HIGHEST DAILY MEAN	12 Jun 6	14 Jun 9	17 Jun 7 1997
LOWEST DAILY MEAN	a.00 Jan 1	b.00 Oct 22	c.00 Dec 6 1995
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Oct 22	.00 Dec 6 1995
MAXIMUM PEAK FLOW		19 Jun 9	d46 Jul 21 1992
MAXIMUM PEAK STAGE		14.77 Jun 9	15.49 Jun 28 2000
ANNUAL RUNOFF (AC-FT)	1020	898	666
ANNUAL RUNOFF (CFSM)	1.28	1.14	.84
ANNUAL RUNOFF (INCHES)	17.47	15.46	11.46
10 PERCENT EXCEEDS	3.9	4.6	2.5
50 PERCENT EXCEEDS	.00	.00	.25
90 PERCENT EXCEEDS	.00	.00	.00

See Period of Record
a Jan. 1 to May 15 and Oct. 22 to Dec. 31
b Oct. 22 to May 12
c No flow most days during winter
d From rating curve extended above 2 ft³/s
e Estimated

15281500 CAMP CREEK NEAR SHEEP MOUNTAIN LODGE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1996 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: June 1996 to current year.

INSTRUMENTATION.--Electronic water-temperature recorder set for 1-hour recording interval.

REMARKS.--No record from October 22 to May 12 due to no flow conditions, and August 3 to September 3 due to equipment problems. Records represent water temperature at the sensor within 0.5° C. Temperature at the sensor was compared with the stream average by cross section on September 28. No variation was found within the cross section. No variation was found between mean stream temperature and temperature at the sensor. Large stream icing forms near the gage.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 9.5 °C, on several days in June and July 1997 and June 29-30, July 1, 1998; minimum, 0.0 °C, on many days during fall, winter, and spring breakup periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 7.5 °C, July 26, but may have been higher during a period of missing record; minimum, 0.0 °C, on many days during fall, winter, and spring breakup periods.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	STREAM WIDTH (FT) (000004)	SAMPLE	GAGE HEIGHT (FEET) (00065)	DIS-	TEMPER-	TEMPER-	SAM-	SAMPLER	
			LOC-		CHARGE,		ATURE-			PLING
			ATION, CROSS		INST.		ATURE			METHOD,
			SECTION (FT FM R BK) (72103)		CUBIC FEET PER SECOND (00061)	WATER (DEG C) (00010)	AIR (DEG C) (00020)	CODES (82398)	TYPE (CODE) (84164)	
SEP										
28...	1202	5.20	1.0	13.90	.77	2.5	5.0	10	8010	
28...	1204	5.20	2.0	13.90	.77	2.5	5.0	10	8010	
28...	1206	5.20	3.0	13.90	.77	2.5	5.0	10	8010	
28...	1208	5.20	4.0	13.90	.77	2.5	5.0	10	8010	
28...	1210	5.20	5.0	13.90	.77	2.5	5.0	10	8010	

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

[illegible]

15281500 CAMP CREEK NEAR SHEEP MOUNTAIN LODGE--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	.0	.0	.0
14	---	---	---	---	---	---	---	---	---	.0	.0	.0
15	---	---	---	---	---	---	---	---	---	.0	.0	.0
16	---	---	---	---	---	---	---	---	---	.0	.0	.0
17	---	---	---	---	---	---	---	---	---	.0	.0	.0
18	---	---	---	---	---	---	---	---	---	.0	.0	.0
19	---	---	---	---	---	---	---	---	---	.5	.0	.0
20	---	---	---	---	---	---	---	---	---	.5	.0	.0
21	---	---	---	---	---	---	---	---	---	.0	.0	.0
22	---	---	---	---	---	---	---	---	---	.5	.0	.0
23	---	---	---	---	---	---	---	---	---	.5	.0	.0
24	---	---	---	---	---	---	---	---	---	.5	.0	.0
25	---	---	---	---	---	---	---	---	---	.5	.0	.0
26	---	---	---	---	---	---	---	---	---	.5	.0	.5
27	---	---	---	---	---	---	---	---	---	.5	.0	.0
28	---	---	---	---	---	---	---	---	---	.5	.0	.5
29	---	---	---	---	---	---	---	---	---	.5	.0	.5
30	---	---	---	---	---	---	---	---	---	1.0	.0	.5
31	---	---	---	---	---	---	---	---	---	1.0	.0	.5
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	1.0	.0	.5	5.5	3.0	4.0	6.0	5.0	5.5	---	---	---
2	1.5	.0	.5	6.5	3.0	4.5	---	4.5	---	---	---	---
3	1.5	.0	.5	5.5	3.0	4.5	---	---	---	---	---	---
4	1.5	.5	.5	4.5	3.5	4.0	---	---	---	4.5	---	---
5	1.5	.5	.5	4.0	3.5	3.5	---	---	---	4.0	3.0	3.0
6	1.0	.5	1.0	3.5	2.5	3.0	---	---	---	4.5	2.5	3.0
7	1.5	.5	1.0	3.0	2.5	2.5	---	---	---	3.5	2.5	3.0
8	2.0	.5	1.0	4.5	2.0	3.0	---	---	---	4.0	2.0	3.0
9	2.5	.5	1.0	5.5	2.0	3.5	---	---	---	4.0	2.0	2.5
10	2.0	.5	1.0	5.5	2.0	3.5	---	---	---	4.0	2.0	2.5
11	2.0	.5	---	4.0	3.0	3.5	---	---	---	3.5	1.5	2.5
12	2.5	.5	1.0	4.5	3.0	3.5	---	---	---	4.0	2.0	3.0
13	2.5	1.0	1.5	5.0	3.0	3.5	---	---	---	4.0	2.0	3.0
14	2.0	1.0	1.5	5.5	3.0	4.0	---	---	---	4.0	2.0	3.0
15	2.5	1.0	1.5	6.0	3.5	4.5	---	---	---	3.5	2.0	2.5
16	2.5	1.0	1.5	6.5	3.5	5.0	---	---	---	4.0	2.0	2.5
17	3.0	1.0	2.0	6.5	4.0	5.0	---	---	---	4.5	2.5	3.5
18	3.0	1.0	2.0	7.0	4.0	5.5	---	---	---	4.5	3.5	3.5
19	---	1.0	---	6.0	4.5	5.5	---	---	---	4.5	3.5	3.5
20	3.0	---	---	6.5	4.5	5.5	---	---	---	4.5	3.0	3.5
21	4.0	1.5	2.5	6.5	5.0	5.5	---	---	---	4.0	2.5	3.0
22	4.0	2.0	2.5	7.0	4.5	5.5	---	---	---	3.5	2.5	3.0
23	4.5	2.0	3.0	6.5	5.0	5.5	---	---	---	3.0	1.5	2.5
24	5.0	2.0	3.5	7.0	5.0	6.0	---	---	---	3.0	1.5	2.5
25	5.0	2.5	3.5	7.0	5.0	6.0	---	---	---	2.5	1.5	2.0
26	5.0	2.5	3.5	7.5	5.0	6.0	---	---	---	3.0	1.5	2.0
27	5.0	2.5	3.5	7.0	5.0	6.0	---	---	---	2.5	1.0	1.5
28	5.5	2.5	4.0	6.0	5.0	5.5	---	---	---	2.5	1.5	2.0
29	6.0	3.0	4.0	6.5	5.0	5.5	---	---	---	2.5	1.0	2.0
30	6.0	3.0	4.0	6.0	5.0	5.5	---	---	---	2.5	1.0	2.0
31	---	---	---	6.0	5.0	5.5	---	---	---	---	---	---
MONTH	---	---	---	7.5	2.0	4.6	---	---	---	---	---	---

15283700 MOOSE CREEK NEAR PALMER

LOCATION.--Lat 61°41'00", long 149°02'36", in NE¹/₄ NE¹/₄ sec. 2, T. 18 N., R. 2 E. (Anchorage C-6 quad), Hydrologic Unit 19020402, on right bank 0.2 mi upstream from Glenn Highway bridge over Moose Creek, 0.8 mi upstream from mouth and 6.5 mi north of Palmer.

DRAINAGE AREA.--47.3 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1998 to September 2001 (discontinued).

REVISED RECORDS.--WDR AK-00-1: 1999, drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 450 ft above sea level, from topographic map.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 18,000 ft³/s, August 10, 1971 (at site 0.3 mi upstream from Buffalo Creek mine and 5 mi upstream from present gage site), gage height not determined.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	219	e65	e40	e24	e23	e20	e18	64	171	230	231	84
2	192	e65	e40	e24	e22	e20	e19	55	239	211	217	83
3	176	e65	e40	e24	e22	e20	e19	50	299	212	204	98
4	164	e65	e40	e24	e22	e20	e19	45	308	211	218	92
5	160	e60	e38	e24	e22	e20	e20	42	289	276	189	137
6	158	e60	e38	e24	e22	e20	e20	42	269	281	171	161
7	143	e60	e38	e24	e21	e20	e20	46	253	242	158	126
8	132	e60	e38	e24	e21	e20	e20	56	240	204	155	113
9	123	e60	e36	e24	e21	e20	e20	59	278	188	164	104
10	115	e55	e36	e24	e21	e20	e21	58	322	172	154	98
11	109	e55	e34	e24	e21	e20	e21	59	403	162	142	94
12	103	e55	e34	e24	e21	e20	e21	65	415	148	137	91
13	100	e55	e34	e24	e21	e20	e21	77	367	147	134	89
14	97	e55	e32	e24	e21	e20	e21	85	396	149	144	86
15	93	e50	e32	e24	e21	e20	e22	87	465	142	167	82
16	90	e50	e32	e26	e20	e20	24	87	514	136	158	78
17	87	e50	e32	e25	e20	e20	24	83	564	135	145	76
18	85	e50	e30	e26	e20	e20	25	86	542	132	152	76
19	83	e48	e30	e26	e20	e20	27	87	503	137	148	79
20	80	e50	e30	e25	e20	e20	30	91	477	177	134	78
21	80	e48	e30	e25	e20	e20	34	89	460	172	123	75
22	82	e46	e29	e25	e20	e20	38	86	429	158	121	72
23	80	e46	e28	e24	e20	e19	42	85	415	147	116	70
24	78	e46	e27	e24	e20	e19	45	80	408	147	143	65
25	76	e44	e27	e24	e20	e19	49	77	371	150	131	65
26	72	e44	e26	e24	e20	e18	55	78	368	165	120	64
27	e70	e44	e26	e24	e20	e18	59	83	354	204	114	62
28	e65	e42	e25	e23	e20	e18	64	110	345	219	103	61
29	e65	e42	e26	e23	---	e18	66	143	308	276	98	59
30	e65	e42	e26	e23	---	e18	68	152	260	258	92	58
31	e65	---	e24	e23	---	e18	---	168	---	294	89	---
TOTAL	3307	1577	998	750	582	605	952	2475	11032	5882	4572	2576
MEAN	107	52.6	32.2	24.2	20.8	19.5	31.7	79.8	368	190	147	85.9
MAX	219	65	40	26	23	20	68	168	564	294	231	161
MIN	65	42	24	23	20	18	18	42	171	132	89	58
AC-FT	6560	3130	1980	1490	1150	1200	1890	4910	21880	11670	9070	5110
CFSM	2.26	1.11	.68	.51	.44	.41	.67	1.69	7.77	4.01	3.12	1.82
IN.	2.60	1.24	.78	.59	.46	.48	.75	1.95	8.68	4.63	3.60	2.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2001, BY WATER YEAR (WY)#

	MEAN	98.8	48.6	27.6	21.7	18.5	16.7	28.8	78.7	339	212	182	139
MAX	107	55.4	32.2	24.2	20.8	19.5	34.4	89.9	385	327	210	236	
(WY)	2001	2000	2001	2001	2001	2001	2000	2000	2000	2000	1999	2000	
MIN	87.4	37.8	24.8	19.1	14.6	14.1	20.2	66.5	265	152	147	85.9	
(WY)	1999	1999	1999	1999	1999	1999	1999	1999	1999	1998	2001	2001	

See period of record, partial years used in monthly statistics
e Estimated

15283700 MOOSE CREEK NEAR PALMER--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1998 - 2001#	
ANNUAL TOTAL	46144		35308			
ANNUAL MEAN	126		96.7		103	
HIGHEST ANNUAL MEAN					125	
LOWEST ANNUAL MEAN					87.0	
HIGHEST DAILY MEAN	754 Sep 22		564 Jun 17		754 Sep 22 2000	
LOWEST DAILY MEAN	a15 Mar 26		b18 Mar 26		c13 Feb 3 1999	
ANNUAL SEVEN-DAY MINIMUM	15 Mar 24		18 Mar 26		14 Apr 8 1999	
MAXIMUM PEAK FLOW			658 Jun 17		1080 Sep 22 2000	
MAXIMUM PEAK STAGE			14.70 Jun 17		15.32 Sep 22 2000	
MAXIMUM PEAK STAGE			d16.36 Dec 16		d16.36 Dec 16 2000	
ANNUAL RUNOFF (AC-FT)	91530		70030		74680	
ANNUAL RUNOFF (CFSM)	2.67		2.05		2.18	
ANNUAL RUNOFF (INCHES)	36.29		27.77		29.61	
10 PERCENT EXCEEDS	367		230		248	
50 PERCENT EXCEEDS	66		60		72	
90 PERCENT EXCEEDS	18		20		18	

See period of record, partial years used in monthly statistics

a Mar.26 to Mar.30

b Mar.26 to Apr.1

c Feb.3 to Feb.4 and Apr.12 to Apr.14, 1999

d Backwater from ice

15283700 MOOSE CREEK NEAR PALMER--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1948-49, 1951-52, 1956, 1998 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

				DIS-CHARGE, INST.	COLOR			BARO-METRIC		OXYGEN, DIS-SOLVED	PH WATER WHOLE	SPE- CIFIC	
				CUBIC FEET PER SECOND	(PLAT- INUM COBALT UNITS)	SAM- PLING METHOD, CODES	STREAM WIDTH (FT)	PRES- SURE OF (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	(PER- CENT SATUR- ATION)	FIELD (STAND- ARD UNITS)	CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
DATE	TIME	MEDIUM CODE	SAMPLE TYPE	(00061)	(00080)	(82398)	(00004)	(00025)	(00300)	(00301)	(00400)	(00095)	(00010)
MAR 2001													
27...	1330	9	9	18	<1	10	24.0	713	13.1	96	8.1	144	.1
JUN													
19...	1310	9	9	465	--	10	--	737	11.6	99	7.8	57	7.1

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/S AS CACO3) (39086)	ANC WATER UNFLTRD FET FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE DIS IT FIELD (MG/L AS HCO3) (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG.C DIS- SOLVED (MG/L) (70300)
MAR 2001													
27...	60	19.4	2.83	.51	5.3	48	49	58	4.5	<.2	6.5	12.5	90
JUN 19...	24	8.10	.946	.31	1.3	21	22	27	.6	<.2	3.8	4.7	43

	SOLDS, SUM OF CON- STITU- ENTS, DIS- SOLVED (MG/L)	NITRO- GEN, AMMO- NIA DIS- SOLVED (MG/L) AS N)	NITRO- GEN, AMMO- NIA + ORGANIC DIS. (MG/L) AS N)	NITRO- GEN, AMMO- NIA + ORGANIC TOTAL (MG/L) AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS N)	NITRO- GEN, PARTI- CULATE WAT FLT SUSP (MG/L) AS N)	PHOS- PHORUS PHOS- DIS- SOLVED (MG/L) AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L) AS P)	PHOS- PHORUS TOTAL (MG/L) AS P)	CAR- BON, INORG + ORGANIC PAR- TIC. TOTAL (MG/L) AS C)	CAR- BON, INOR- GANIC, PAR- TIC. TOTAL (MG/L) AS C)	CAR- BON, ORGANIC DIS- SOLVED (MG/L) AS C)
DATE	(70301)	(00608)	(00623)	(00625)	(00631)	(00613)	(49570)	(00666)	(00671)	(00665)	(00694)	(00688)	(00681)
MAR 2001													
27...	82	.006	E.06	<.08	.400	<.001	<.022	<.006	<.007	E.002	<.1	<.1	.64
JUN													
19...	34	.002	<.10	<.08	.099	<.001	<.022	<.006	<.007	.013	<.1	--	.89

DATE	CAR- BON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C)	ALUMI- NUM, TOTAL (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BAR- IUM, TOTAL (UG/L AS BA)	BERYL- LIUM, TOTAL (UG/L AS BE)	CAD- MIUM, UNFL- TRD TOTAL (UG/L AS CD)	CHRO- MIUM, RECOV- ERABLE (UG/L AS CR)	COP- PER, RECOV- ERABLE (UG/L AS CU)	CYA- NIDE TOTAL (MG/L AS CN)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	
	(00689)	(01105)	(01002)	(01007)	(01012)	(01027)	(01034)	(01042)	(00720)	(01046)	(01045)	(01051)	(01056)	
	MAR 2001													
	27...	<.1	<28	<2	32.2	<2.50	<.11	<1	<1.8	<.01	M	E10	<1	<3.2
JUN														
19...	--	361	E2	23.3	<2.50	<.10	<1	1.9	<.01	M	480	<1	<3.0	

15283700 MOOSE CREEK NEAR PALMER--Continued

DATE	MANGA- NESE, TOTAL RECOVER- ABLE (UG/ L AS MN) (01055)	MERCURY TOTAL RECOVER- ABLE (UG/ L AS HG) (71900)	NICKEL, TOTAL RECOVER- ABLE (UG/ L AS NI) (01067)	SELE- NIUM, TOTAL RECOVER- TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOVER- ABLE (UG/ L AS AG) (01077)	ZINC, TOTAL RECOVER- ABLE (UG/ L AS ZN) (01092)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	PURPOSE SITE VISIT, (CODE) (50280)	SAMPLER TYPE (CODE) (84164)
MAR 2001										
27...	<3	<.14	<2	<2.6	<.43	<31	<1	--	1099	3045
JUN										
19...	14	<.01	<2	<3.0	<.40	<31	16	20	1099	3045

15284000 MATANUSKA RIVER NEAR PALMER

LOCATION.--Lat 61°36'33", long 149°04'15", in SE¹/₄ NW¹/₄ sec. 34, T. 18 N., R. 2 E. (Anchorage C-6 quad), Matanuska-Susitna Borough, Hydrologic Unit 19020402, on downstream left bank of old Glenn Highway bike path bridge, and 1 mi east of Palmer.

DRAINAGE AREA.--2,070 mi², approximately.

PERIOD OF RECORD.--April 1949 to September 1973, May 1985 to September 1986, October 1991 to September 1992, and May 2000 to current year. Annual maximum, water year 1974 and 1995.

GAGE.--Water-stage recorder. Datum of gage is 170.92 ft above National Geodetic Vertical Datum of 1929 (Alaska Railroad Commission benchmark, prior to Mar. 27, 1964 earthquake). Prior to Nov. 2, 1950, non-recording gage at bridge 20 ft upstream at same datum. Nov. 2, 1950 to Apr. 30, 1952, non-recording gage at current site and same datum. May 1, 1952 to Sep. 30, 1973, July 19 to Oct. 20, 1987, and Oct. 1, 1991 to Sep. 30, 1992, water-stage recorder at site 100 ft downstream at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 21,000 ft³/s and maximum (*).

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Jun 18	0945	a32,700	a11.22	Jul 23	0100	a22,200	a10.82
Jun 29	0645	*a34,300	a11.24				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5780	e1600	1090	e900	e650	540	616	942	4160	22400	12800	5070
2	5180	e1600	899	899	e650	553	576	794	6080	19300	12000	5530
3	4840	e1600	829	860	e650	610	566	750	7280	18800	11800	8690
4	4810	e1600	985	1020	e650	543	558	687	7940	16700	11100	8980
5	4840	e1600	e1100	889	e650	540	536	643	7850	15200	11600	7750
6	4740	1730	e1000	853	e650	579	511	647	7280	14200	10300	6830
7	4450	1590	e1000	e850	626	556	512	660	7800	13700	9730	5690
8	4190	1710	e1000	e850	690	543	526	746	6360	14000	9790	5120
9	3890	1930	e1000	e800	637	546	507	833	6140	12000	9590	4680
10	3630	1940	e1000	e800	697	579	508	819	7220	11000	9320	4330
11	3500	1860	e1000	e800	631	556	633	830	10600	10200	8620	4080
12	3360	1540	e1000	777	606	581	581	852	11300	9540	9630	3950
13	3250	1410	e1000	810	564	573	621	927	10300	8700	11300	3820
14	3110	1460	962	979	631	555	624	1080	11300	8460	12300	3620
15	2950	1400	989	1070	625	527	619	1190	13600	8520	12200	3420
16	2810	1430	e950	885	716	546	642	1240	15900	9220	13500	3290
17	2680	1540	e950	779	720	e550	663	1250	20100	10400	13800	3230
18	2480	1510	e950	821	654	e550	689	1270	24700	11400	14000	3290
19	2370	1510	e950	837	635	e550	780	1340	22600	12400	11400	3570
20	2170	1460	e950	716	622	e550	e820	1540	21200	14800	9840	3740
21	2060	1410	e950	645	612	e550	e870	1680	18100	16000	9420	3680
22	2000	1310	e950	680	571	560	e820	1780	13500	16700	11100	3430
23	2070	1170	e950	688	555	575	e790	1760	13500	18900	10100	3200
24	2020	e1200	e950	678	653	664	797	1790	18500	18000	9290	2960
25	2010	e1200	e950	687	531	667	885	1750	19700	17000	8500	2800
26	2020	e1200	e950	661	571	744	933	1740	21600	15200	7970	2610
27	1860	e1100	e900	690	593	730	945	1810	28300	13700	7770	2490
28	e1700	e1100	e900	638	579	642	975	1960	30700	12600	7480	2360
29	e1700	e1100	e900	e650	---	567	937	2790	31300	10600	7400	2270
30	e1700	1070	e900	e650	---	638	936	3530	28500	10500	6550	2190
31	e1700	---	e900	e650	---	605	---	4860	---	12100	5790	---
TOTAL	95870	43880	29804	24512	17619	18069	20976	44490	453410	422240	315990	126670
MEAN	3093	1463	961	791	629	583	699	1435	15110	13620	10190	4222
MAX	5780	1940	1100	1070	720	744	975	4860	31300	22400	14000	8980
MIN	1700	1070	829	638	531	527	507	643	4160	8460	5790	2190
AC-FT	190200	87040	59120	48620	34950	35840	41610	88250	899300	837500	626800	251200
CFSM	1.49	.71	.46	.38	.30	.28	.34	.69	7.30	6.58	4.92	2.04
IN.	1.72	.79	.54	.44	.32	.32	.38	.80	8.15	7.59	5.68	2.28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2001, BY WATER YEAR (WY)#

	1939	1985	1972	1961	1959	1971	1964	1960	1965	1973	1969	1966
MEAN	1939	985	728	621	519	473	637	2657	10210	13170	9945	4916
MAX	3093	1793	1024	821	629	583	985	6019	17250	18750	15730	8966
(WY)	2001	1972	1972	1961	2001	2001	1964	1960	1964	2000	1971	1951
MIN	1166	568	440	349	381	360	465	1007	5415	9206	4992	2123
(WY)	1992	1959	1969	1959	1971	1971	1972	1966	1965	1973	1969	1969

a Peak discharge adjusted to exclude surge; peak gage-height not adjusted to exclude surge
e Estimated

15284000 MATANUSKA RIVER NEAR PALMER--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1949 - 2001#	
ANNUAL TOTAL			1613530			
ANNUAL MEAN			4421		3835	
HIGHEST ANNUAL MEAN					4815	1957
LOWEST ANNUAL MEAN					2562	1969
HIGHEST DAILY MEAN	a31300	Jul 1	31300	Jun 29	40700	Aug 10 1971
LOWEST DAILY MEAN	808	Apr 20	507	Apr 9	234	Apr 25 1956
ANNUAL SEVEN-DAY MINIMUM	914	Dec 25	523	Apr 4	304	Apr 20 1956
MAXIMUM PEAK FLOW			b34300	Jun 29	c82100	Aug 10 1971
MAXIMUM PEAK STAGE			b11.24	Jun 29	d13.60	Aug 10 1971
INSTANTANEOUS LOW FLOW			415	Mar 4		
ANNUAL RUNOFF (AC-FT)			3200000		2778000	
ANNUAL RUNOFF (CFSM)			2.14		1.85	
ANNUAL RUNOFF (INCHES)			29.00		25.17	
10 PERCENT EXCEEDS	19800		12700		12200	
50 PERCENT EXCEEDS	4900		1430		1310	
90 PERCENT EXCEEDS	998		579		480	

See Period of Record; partial years used in monthly statistics

a Jul. 1 and Jul. 5

b Peak discharge adjusted to exclude surge; peak gage-height not adjusted to exclude surge.

c From rating curve extended above 34,000 ft³/s on basis of velocity-area study, from break-out of natural reservoir on Granite Creek tributary

d Site then in use

15290000 LITTLE SUSITNA RIVER NEAR PALMER

LOCATION.--Lat 61°42'37", long 149°13'47", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 26, T. 19 N., R. 1 E. (Anchorage C-6 NW quad), Matanuska-Susitna Borough, Hydrologic Unit 19020505, on right bank 100 ft downstream from highway bridge on Wasilla-Fishhook Road, 1.5 mi north of road junction, 1.8 mi downstream from unnamed tributary, and 8 mi northwest of Palmer. Prior to October 1, 1991 at site 60 ft upstream.

DRAINAGE AREA.--61.9 mi².

PERIOD OF RECORD.--July 1948 to current year. Low-flow records not equivalent prior to January 1962 because most measurements below 300 ft³/s were made at site 3.4 mi downstream.

GAGE.--Water-stage recorder. Datum of gage is 916.6 ft above sea level (river-profile survey). Prior to August 16, 1948, non-recording gage and August 17, 1948 to May 15, 1972, water-stage recorder on left bank; water-stage recorder on right bank, May 16, 1972 to September 30, 1991, at site 60 ft upstream. Prior to October 1, 1974, at datum 4.00 ft higher; October 1, 1974 to September 30, 1991, at datum 2.00 ft higher.

REMARKS.--Records fair except for October 28 to March 23 (flow under ice), and for discharges above 700 ft³/s, which are poor. GOES satellite telemetry at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft³/s and maximum (*).

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 17	2315	1420	5.59	June 20	2345	1630*	5.75*

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	344	93	e60	35	28	23	22	48	517	466	407	185
2	306	e90	e60	36	29	23	20	40	697	439	376	184
3	283	e90	e60	35	27	e23	21	36	806	412	364	225
4	262	e85	e60	34	27	23	21	33	756	400	395	223
5	263	e85	e60	35	27	23	20	31	728	533	349	330
6	271	e85	e55	34	27	23	20	31	650	456	322	345
7	239	e80	e55	34	27	23	20	33	591	398	302	301
8	216	e80	e55	33	26	23	21	39	553	369	288	282
9	201	81	e55	33	26	23	20	40	652	372	274	259
10	190	91	e50	32	e26	23	21	41	783	338	259	246
11	183	e85	e50	32	26	23	21	45	959	335	242	231
12	174	e80	e50	32	26	23	21	55	918	307	234	220
13	167	e75	49	32	27	22	21	72	796	302	233	210
14	161	74	48	32	28	22	21	92	855	296	263	199
15	154	68	e48	34	26	22	21	111	972	282	305	185
16	147	84	e46	32	26	22	21	121	1060	274	279	177
17	141	71	e48	32	25	22	21	121	1100	278	273	169
18	134	66	51	31	25	e22	22	143	1060	271	287	166
19	129	65	48	31	25	e22	23	156	993	290	269	172
20	118	64	45	30	25	e22	25	183	983	378	251	170
21	115	63	44	30	25	e20	28	194	1060	337	238	161
22	125	60	44	30	24	e20	31	191	854	307	229	151
23	113	63	48	30	24	e20	35	189	859	286	217	142
24	113	75	43	29	26	22	33	180	839	306	308	135
25	108	72	40	29	25	22	36	169	738	296	261	129
26	98	e70	39	29	24	22	40	169	809	319	243	123
27	98	e65	37	29	24	21	43	204	719	400	220	118
28	e100	e65	37	e26	24	21	47	300	779	369	216	114
29	e100	e65	38	e28	---	21	50	372	598	380	217	109
30	e95	e65	40	e28	---	21	53	428	516	425	201	104
31	e95	---	37	28	---	20	---	475	---	464	195	---
TOTAL	5243	2255	1500	975	725	682	819	4342	24200	11085	8517	5765
MEAN	169	75.2	48.4	31.5	25.9	22.0	27.3	140	807	358	275	192
MAX	344	93	60	36	29	23	53	475	1100	533	407	345
MIN	95	60	37	26	24	20	20	31	516	271	195	104
MED	147	74	48	32	26	22	21	121	801	338	263	180
AC-FT	10400	4470	2980	1930	1440	1350	1620	8610	48000	21990	16890	11430
CFSM	2.73	1.21	.78	.51	.42	.36	.44	2.26	13.0	5.78	4.44	3.10
IN.	3.15	1.36	.90	.59	.44	.41	.49	2.61	14.54	6.66	5.12	3.46

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2001, BY WATER YEAR (WY)#

	MEAN	138	62.6	40.2	30.8	24.8	20.4	25.2	218	671	500	408	302
MAX	391	134	61.7	54.1	41.2	29.7	68.0	649	1215	1047	909	651	
(WY)	1984	1980	1980	1961	1982	1991	1990	1990	1977	1963	1971	1985	
MIN	51.3	24.5	17.4	17.5	14.0	10.0	10.0	52.9	276	193	169	82.2	
(WY)	1969	1969	1955	1959	1952	1956	1955	1971	1996	1996	1969	1969	

See Period of Record for remark on low-flow records; partial years used in monthly statistics
e Estimated

15290000 LITTLE SUSITNA RIVER NEAR PALMER--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1948 - 2001#	
ANNUAL TOTAL	86367		66108			
ANNUAL MEAN	236		181		204	
HIGHEST ANNUAL MEAN					316	1949
LOWEST ANNUAL MEAN					95.8	1969
HIGHEST DAILY MEAN	1680	Sep 22	1100	Jun 17	5040	Aug 10 1971
LOWEST DAILY MEAN	a22	Apr 7	b20	Mar 21	c8.0	Apr 1 1956
ANNUAL SEVEN-DAY MINIMUM	22	Apr 5	20	Apr 2	8.0	Apr 1 1956
MAXIMUM PEAK FLOW			1630	Jun 20	d7840	Aug 10 1971
MAXIMUM PEAK STAGE			5.75	Jun 20	f13.00	Aug 10 1971
INSTANTANEOUS LOW FLOW			19	Apr 1	8.0	Apr 1 1956
ANNUAL RUNOFF (AC-FT)	171300		131100		147500	
ANNUAL RUNOFF (CFSM)	3.81		2.93		3.29	
ANNUAL RUNOFF (INCHES)	51.90		39.73		44.69	
10 PERCENT EXCEEDS	765		432		568	
50 PERCENT EXCEEDS	89		80		70	
90 PERCENT EXCEEDS	28		22		20	

See Period of Record for remark on low-flow records; partial years used in monthly statistics

a Apr. 7 to Apr. 11

b Mar. 21 to Mar. 23, Mar. 31, Apr. 2, Apr. 5 to Apr. 7 and Apr. 9

c Apr. 1 to Apr. 20, 1956; and Mar. 11 and 12, 1957

d From rating curve extended above 4,600 ft³/s on basis of slope-area measurement of peak flow

f Gage height about 13.0 ft, from floodmarks; 9.84 ft in gage well; 12.30 ft at top of needle peak in gage well; at prior datum (WY 1974-91) at sites then in use

15292000 SUSITNA RIVER AT GOLD CREEK

LOCATION.--Lat 62°46'04", long 149°41'28", in NW¹/₄ sec. 20, T. 31 N., R. 2 W. (Talkeetna Mts. D-6 quad), Matanuska-Susitna Borough, Hydrologic Unit 19020501, near left bank under Alaska Railroad bridge, 0.1 mi downstream from Gold Creek, 0.9 mi north of Gold Creek railroad station, and 2.0 mi. downstream from Indian River.

DRAINAGE AREA.--6,160 mi², approximately.

PERIOD OF RECORD.--August 1949 to 1996 and May 25 to September 30, 2001.

GAGE.--Water-stage recorder. Elevation of gage is 676.50 ft above sea level. Prior to June 6, 1957, non-recording gage at same site and datum. June 7, 1957 to June 2, 1964, water-stage recorder at site 0.3 mi upstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	24000	22700	38400	13700
2	---	---	---	---	---	---	---	---	26800	20900	32100	12900
3	---	---	---	---	---	---	---	---	e30000	19900	28000	13000
4	---	---	---	---	---	---	---	---	e38000	20300	28300	13800
5	---	---	---	---	---	---	---	---	e36000	21800	27600	15500
6	---	---	---	---	---	---	---	---	e36000	24900	24200	18000
7	---	---	---	---	---	---	---	---	e35400	24000	21100	16800
8	---	---	---	---	---	---	---	---	34100	21500	19800	13800
9	---	---	---	---	---	---	---	---	31100	22500	19300	12300
10	---	---	---	---	---	---	---	---	28700	28600	17900	11100
11	---	---	---	---	---	---	---	---	29800	20900	16500	10300
12	---	---	---	---	---	---	---	---	33600	18600	15600	9760
13	---	---	---	---	---	---	---	---	34400	18300	15400	9570
14	---	---	---	---	---	---	---	---	34500	16600	15100	10100
15	---	---	---	---	---	---	---	---	33400	16100	17000	9940
16	---	---	---	---	---	---	---	---	31800	17000	21000	9380
17	---	---	---	---	---	---	---	---	30900	17700	23200	8840
18	---	---	---	---	---	---	---	---	31100	17400	25700	8440
19	---	---	---	---	---	---	---	---	32800	17100	28400	8360
20	---	---	---	---	---	---	---	---	34400	18600	28100	8330
21	---	---	---	---	---	---	---	---	33900	21100	23200	8710
22	---	---	---	---	---	---	---	---	33500	24400	21500	9100
23	---	---	---	---	---	---	---	---	31900	24900	20800	9020
24	---	---	---	---	---	---	---	---	29800	24500	23100	8410
25	---	---	---	---	---	---	---	16800	28500	22000	22500	7900
26	---	---	---	---	---	---	---	15500	27600	21600	19300	7380
27	---	---	---	---	---	---	---	15100	26200	23100	17900	7040
28	---	---	---	---	---	---	---	18200	25300	25300	17000	6720
29	---	---	---	---	---	---	---	21800	23400	28200	16500	6460
30	---	---	---	---	---	---	---	23200	23100	29100	15900	e6000
31	---	---	---	---	---	---	---	24600	---	33900	15100	---
TOTAL	---	---	---	---	---	---	---	---	930000	683500	675500	310660
MEAN	---	---	---	---	---	---	---	---	31000	22050	21790	10360
MAX	---	---	---	---	---	---	---	---	38000	33900	38400	18000
MIN	---	---	---	---	---	---	---	---	23100	16100	15100	6000
AC-FT	---	---	---	---	---	---	---	---	1845000	1356000	1340000	616200
CFSM	---	---	---	---	---	---	---	---	5.03	3.58	3.54	1.68
IN.	---	---	---	---	---	---	---	---	5.62	4.13	4.08	1.88

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2001, BY WATER YEAR (WY)#

	MEAN	6208	2658	1878	1591	1399	1289	1648	13500	27040	24010	21350	13660
MAX	12680	4192	3264	2452	2028	1900	4250	25630	50580	34400	37870	26510	
(WY)	1987	1980	1958	1961	1972	1968	1990	1990	1964	1963	1981	1990	
MIN	3124	1215	866	724	723	713	745	3745	15500	16010	8879	5093	
(WY)	1970	1970	1970	1969	1969	1964	1964	1971	1969	1996	1969	1969	

SUMMARY STATISTICS	FOR 2001 WATER YEAR	WATER YEARS 1949 - 2001#
ANNUAL MEAN		9724
HIGHEST ANNUAL MEAN		13020
LOWEST ANNUAL MEAN		5597
HIGHEST DAILY MEAN	38400	Aug 1 85900
LOWEST DAILY MEAN		a600 Jun 7 1964
ANNUAL SEVEN-DAY MINIMUM		614 Feb 16 1950
MAXIMUM PEAK FLOW	40200	Aug 1 90700
MAXIMUM PEAK STAGE	12.22	Aug 1 16.58
MAXIMUM PEAK STAGE		b24.48 May 10 1954
ANNUAL RUNOFF (AC-FT)		7045000
ANNUAL RUNOFF (CFSM)		1.58
ANNUAL RUNOFF (INCHES)		21.45
10 PERCENT EXCEEDS		25700
50 PERCENT EXCEEDS		3400
90 PERCENT EXCEEDS		1100

See Period of Record; partial years used in monthly statistics

a Feb. 16-20, 1950

b Maximum observed, ice jam

e Estimated

15292700 TALKEETNA RIVER NEAR TALKEETNA
(Hydrologic Bench-Mark Station)

LOCATION.--Lat 62°20'49", long 150°01'01", in NE¹/₄ sec. 16, T. 26 N., R. 4 W. (Talkeetna B-1 quad), Matanuska-Susitna Borough, Hydrologic Unit 19020503, on left bank 1.7 mi downstream from Chunilna Creek, 3.5 mi northeast of Talkeetna, and about 5 mi upstream from mouth.

DRAINAGE AREA.--1,996 mi².

REVISED RECORDS.-- WRD AK 2000-1: Drainage Area.

PERIOD OF RECORD.--June 1964 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 400 ft above sea level, from topographic map. From October 1, 1992 to September 30, 1994 at site 0.5 mi upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5570	e1600	e1000	e750	e650	e550	e500	e800	9800	7560	11600	5690
2	4970	e1600	e1000	e750	e630	e550	e525	e850	12500	7480	10400	5590
3	4640	e1500	e950	e750	e630	e550	e525	e850	14100	7350	10400	5800
4	4670	e1500	e950	e750	e630	e550	e525	e900	15200	7010	11100	6110
5	4780	e1500	e950	e750	e630	e550	e525	e900	13800	7980	10200	7200
6	5030	e1500	e950	e750	e630	e550	e550	e950	11900	8380	9040	7200
7	4670	e1400	e950	e750	e630	e550	e550	e950	13100	7250	8400	e6500
8	4430	e1400	e900	e750	e630	e550	e550	e1020	11400	6350	8240	e6000
9	4150	e1400	e900	e750	e600	e530	e550	e1100	11100	6030	7950	e5000
10	3710	e1400	e900	e750	e600	e530	e550	e1200	11800	5780	7450	4640
11	3740	e1300	e900	e750	e600	e530	e550	e1300	13500	5960	6900	4410
12	3500	e1300	e900	e750	e600	e530	e550	e1400	16200	5710	6690	4190
13	3470	e1300	e900	e720	e600	e530	e550	e1600	13900	5480	6720	4050
14	3330	e1200	e850	e720	e600	e530	e600	1770	13100	5900	7410	4010
15	3210	e1200	e850	e720	e600	e530	e600	2340	13400	5740	8140	3720
16	3030	e1200	e850	e720	e600	e530	e600	2890	13700	5600	9910	3530
17	2930	e1200	e850	e720	e600	e530	e600	3210	13300	5890	10100	3390
18	2770	e1200	e850	e720	e570	e530	e600	3690	13600	6030	10700	3290
19	2650	e1200	e850	e720	e570	e530	e650	3880	13300	6280	10700	3240
20	2350	e1100	e850	e700	e570	e530	e650	4670	14600	7600	9490	3290
21	2090	e1100	e850	e700	e570	e530	e650	5230	13900	8400	8270	3250
22	2080	e1100	e800	e700	e570	e500	e650	5180	12900	9990	7980	3020
23	2410	e1100	e800	e700	e570	e500	e650	5100	11600	13200	7480	2860
24	2110	e1100	e800	e700	e570	e500	e700	5440	10800	11600	7920	2740
25	2200	e1100	e800	e670	e570	e500	e700	5460	10800	10600	7850	2710
26	2190	e1100	e800	e670	e570	e500	e700	5290	10000	10200	7140	2930
27	1810	e1000	e800	e670	e570	e500	e750	5510	9290	9910	6840	2680
28	1740	e1000	e800	e650	e570	e500	e750	7930	9400	10100	6400	2540
29	e1700	e1000	e800	e650	---	e500	e750	10100	9480	9800	6110	2450
30	e1700	e1000	e800	e650	---	e500	e800	10600	8670	10300	5780	2360
31	e1600	---	e800	e650	---	e500	---	10200	---	12800	5750	---
TOTAL	99230	37600	26950	22150	16730	16290	18400	112310	370140	248260	259060	124390
MEAN	3201	1253	869	715	598	525	613	3623	12340	8008	8357	4146
MAX	5570	1600	1000	750	650	550	800	10600	16200	13200	11600	7200
MIN	1600	1000	800	650	570	500	500	800	8670	5480	5750	2360
AC-FT	196800	74580	53460	43930	33180	32310	36500	222800	734200	492400	513800	246700
CFSM	1.60	.63	.44	.36	.30	.26	.31	1.82	6.18	4.01	4.19	2.08
IN.	1.85	.70	.50	.41	.31	.30	.34	2.09	6.90	4.63	4.83	2.32

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2001, BY WATER YEAR (WY)#

	MEAN	2798	1171	834	684	576	517	666	4726	11070	10370	9133	5800
MAX	10000	1992	1122	996	990	1058	1912	11510	19040	15410	16770	12090	
(WY)	1987	1987	1987	1990	1990	1990	1990	1990	1971	1981	1971	1993	
MIN	1424	672	538	457	401	285	396	2145	5207	7080	3787	2070	
(WY)	1997	1992	1996	1996	1969	1982	1986	1971	1969	1969	1969	1969	

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1964 - 2001#
ANNUAL TOTAL	1642790	1351510	
ANNUAL MEAN	4488	3703	4042
HIGHEST ANNUAL MEAN			5389
LOWEST ANNUAL MEAN			2249
HIGHEST DAILY MEAN	21500	Jun 28	63200
LOWEST DAILY MEAN	a500	Feb 29	c260
ANNUAL SEVEN-DAY MINIMUM	500	Feb 29	260
MAXIMUM PEAK FLOW		17500	Jun 12
MAXIMUM PEAK STAGE		9.16	Jun 12
ANNUAL RUNOFF (AC-FT)	3258000	2681000	2928000
ANNUAL RUNOFF (CFSM)	2.25	1.86	2.02
ANNUAL RUNOFF (INCHES)	30.62	25.19	27.51
10 PERCENT EXCEEDS	14200	10200	10700
50 PERCENT EXCEEDS	1600	1400	1400
90 PERCENT EXCEEDS	550	550	500

See Period of Record; partial years used in monthly statistics

a Feb. 29 to Apr. 1

b Mar. 22 to Apr. 1

c From Feb. 27 to Mar. 20, 1982

e Estimated

15294005 WILLOW CREEK NEAR WILLOW

LOCATION.--Lat 61°46'51", long 149°53'04", in NW¹/₄ SE¹/₄ sec. 31, T.20 N., R.3 W. (Anchorage D-8 quad), Matanuska-Susitna Borough, Hydrologic Unit 19020505, on the right bank, 0.9 mi downstream from unnamed tributary, 5.5 mi northeast of Willow, and 6.7 mi upstream from Deception Creek.

DRAINAGE AREA.--166 mi².

PERIOD OF RECORD.--June 1978 to September 1993, and May to September 2001.

REVISED RECORDS.--WRD-AK-80-1: 1979 (M).

GAGE.--Water-stage recorder. Elevation of gage is 350 ft above sea level from topographic map. Prior to Apr. 2, 1981 at site 0.2 mi upstream at different datum.

REMARKS.--Records good, except for estimated daily discharges, which are poor. Rain gage at station. GOES satellite telemetry at station.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge 2,300 ft³/s and maximums (*).

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
June 21	0200	*2580	*4.99

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	e80	1120	773	632	274
2	---	---	---	---	---	---	---	e80	1420	724	566	270
3	---	---	---	---	---	---	---	e80	1630	672	592	336
4	---	---	---	---	---	---	---	e90	1520	696	841	326
5	---	---	---	---	---	---	---	e90	1480	1070	709	719
6	---	---	---	---	---	---	---	e100	1380	950	597	653
7	---	---	---	---	---	---	---	e100	1320	733	535	536
8	---	---	---	---	---	---	---	e100	1320	691	501	512
9	---	---	---	---	---	---	---	e110	1460	776	476	446
10	---	---	---	---	---	---	---	e130	1560	688	449	413
11	---	---	---	---	---	---	---	e140	1750	814	422	384
12	---	---	---	---	---	---	---	e170	1750	665	395	358
13	---	---	---	---	---	---	---	e200	1520	662	373	353
14	---	---	---	---	---	---	---	e260	1430	656	377	341
15	---	---	---	---	---	---	---	e280	1640	570	432	313
16	---	---	---	---	---	---	---	e300	1780	538	418	296
17	---	---	---	---	---	---	---	e350	1800	515	457	283
18	---	---	---	---	---	---	---	458	1740	482	581	271
19	---	---	---	---	---	---	---	479	1550	484	509	279
20	---	---	---	---	---	---	---	539	1480	648	445	271
21	---	---	---	---	---	---	---	590	1950	565	396	255
22	---	---	---	---	---	---	---	587	1520	510	351	242
23	---	---	---	---	---	---	---	539	1430	475	325	229
24	---	---	---	---	---	---	---	554	1410	526	436	219
25	---	---	---	---	---	---	---	513	1260	503	401	211
26	---	---	---	---	---	---	---	467	1320	485	386	204
27	---	---	---	---	---	---	---	498	1260	782	341	197
28	---	---	---	---	---	---	---	702	1340	718	318	191
29	---	---	---	---	---	---	---	894	1060	612	316	184
30	---	---	---	---	---	---	---	1080	930	710	299	178
31	---	---	---	---	---	---	---	1100	---	775	303	---
TOTAL	---	---	---	---	---	---	---	11660	44130	20468	14179	9744
MEAN	---	---	---	---	---	---	---	376	1471	660	457	325
MAX	---	---	---	---	---	---	---	1100	1950	1070	841	719
MIN	---	---	---	---	---	---	---	80	930	475	299	178
AC-FT	---	---	---	---	---	---	---	23130	87530	40600	28120	19330
CFSM	---	---	---	---	---	---	---	2.27	8.86	3.98	2.76	1.96
IN.	---	---	---	---	---	---	---	2.61	9.89	4.59	3.18	2.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2001, BY WATER YEAR (WY)#

	405	162	110	86.6	74.1	64.5	93.9	635	1074	722	620	644
MEAN	405	162	110	86.6	74.1	64.5	93.9	635	1074	722	620	644
MAX	1197	364	152	112	98.8	97.5	205	1578	1500	1287	1286	1177
(WY)	1987	1980	1980	1980	1990	1990	1990	1990	1990	1980	1981	1993
MIN	177	81.5	57.3	57.1	52.9	33.7	50.5	340	484	338	307	259
(WY)	1985	1985	1981	1981	1981	1982	1986	1985	1981	1983	1978	1978

See Period of Record; partial years used in monthly statistics
e Estimated

15294005 WILLOW CREEK NEAR WILLOW--Continued

SUMMARY STATISTICS	FOR 2001 WATER YEAR		WATER YEARS 1978 - 2001#	
ANNUAL MEAN			401	
HIGHEST ANNUAL MEAN			536	1990
LOWEST ANNUAL MEAN			320	1986
HIGHEST DAILY MEAN	1950	Jun 21	8670	Oct 11 1986
LOWEST DAILY MEAN			a33	Mar 9 1982
ANNUAL SEVEN-DAY MINIMUM			33	Mar 9 1982
MAXIMUM PEAK FLOW	2580	Jun 21	b12000	Oct 11 1986
MAXIMUM PEAK STAGE	4.99	Jun 21	9.01	Oct 11 1986
MAXIMUM PEAK STAGE			c9.40	Dec 18 1986
ANNUAL RUNOFF (AC-FT)			290700	
ANNUAL RUNOFF (CFSM)			2.42	
ANNUAL RUNOFF (INCHES)			32.85	
10 PERCENT EXCEEDS			1000	
50 PERCENT EXCEEDS			223	
90 PERCENT EXCEEDS			65	

See Period of Record; partial years used in monthly statistics

a Mar. 9-30, 1982

b From rating curve extended above 3,900 ft³/s on basis of slope-area measurement of peak flow

c Backwater from ice

15294100 DESHKA RIVER NEAR WILLOW

LOCATION.--Lat 61°46'05", long 150°20'13", in SW¹/₄ NE¹/₄ sec. 3, T. 19 N., R. 6 W. (Tyonek D-1 quad), Mantanuska-Susitna Borough, Hydrologic Unit 19020505, on left bank, 0.2 mi upstream from unnamed tributary, 1.1 mi downstream from unnamed tributary, 7.9 mi upstream from mouth, and 10 mi west of Willow.

DRAINAGE AREA.--591 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1978 to September 1986, and October 1998 to September 2001 (discontinued).

REVISED RECORDS.--WRD AK-83-1: 1980, WRD AK-00-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 80 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge 3,600 ft³/s and maximums (*).

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
May 01	2015	4440	4.40	May 20	1630	*4850	*4.62

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	720	e400	e380	e320	e260	e270	e290	4280	1880	250	1610	558
2	655	e400	e360	e320	e260	e270	e290	4130	1600	240	1590	553
3	589	e400	e360	e320	e260	e270	e290	3440	1420	229	1010	524
4	550	e400	e360	e320	e260	e270	e290	2980	1200	250	928	536
5	600	e400	e360	e320	e260	e270	e290	2650	1030	309	1500	1200
6	756	e400	e360	e320	e260	e280	e290	2430	902	377	1180	2820
7	1080	e400	e360	e320	e260	e280	e300	2310	853	420	827	3060
8	1230	e400	e360	e320	e260	e280	e300	2300	851	346	636	2310
9	1080	e420	e360	e300	e260	e280	e300	2480	873	301	535	1720
10	920	e440	e360	e300	e260	e280	e300	2920	767	308	465	1360
11	805	e440	e360	e300	e260	e280	e300	3290	688	365	426	1140
12	724	e420	e360	e300	e260	e280	e300	3420	660	796	392	978
13	662	e400	e340	e300	e260	e290	e300	3470	664	1030	371	879
14	e600	e400	e340	e290	e260	e290	e300	3630	661	725	347	809
15	e550	e400	e340	e290	e260	e290	e300	3870	610	565	328	776
16	e500	e400	e340	e290	e260	e290	e300	4140	554	475	370	727
17	e480	e400	e340	e290	e260	e290	e320	4400	501	413	1050	679
18	e460	e400	e340	e280	e260	e290	e320	4540	453	371	1260	640
19	e460	e420	e340	e280	e260	e280	e320	4680	421	335	1470	609
20	e440	e420	e340	e280	e260	e280	e340	4780	399	352	1500	584
21	e420	e400	e340	e280	e260	e280	e360	4640	379	561	1530	550
22	e420	e400	e340	e280	e260	e280	e400	4420	362	720	1150	510
23	e420	e380	e340	e270	e260	e280	e500	4300	362	673	848	488
24	e420	e380	e340	e270	e260	e280	e700	4010	338	677	713	475
25	e420	e380	e340	e260	e260	e290	e1000	3660	316	596	699	460
26	e420	e380	e340	e260	e260	e290	e1400	3230	299	565	807	444
27	e420	e380	e340	e260	e260	e290	e1900	2840	313	531	695	423
28	e400	e380	e340	e260	e270	e290	e2500	2770	298	580	607	406
29	e400	e380	e340	e260	---	e290	3440	2940	278	621	562	386
30	e400	e380	e340	e260	---	e290	3940	2930	259	550	556	376
31	e400	---	e340	e260	---	e290	---	2460	---	583	558	---
TOTAL	18401	12000	10800	8980	7290	8760	22180	108340	20191	15114	26520	26980
MEAN	594	400	348	290	260	283	739	3495	673	488	855	899
MAX	1230	440	380	320	270	290	3940	4780	1880	1030	1610	3060
MIN	400	380	340	260	260	270	290	2300	259	229	328	376
AC-FT	36500	23800	21420	17810	14460	17380	43990	214900	40050	29980	52600	53510
CFSM	1.00	.68	.59	.49	.44	.48	1.25	5.91	1.14	.82	1.45	1.52
IN.	1.16	.76	.68	.57	.46	.55	1.40	6.82	1.27	.95	1.67	1.70

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2001, BY WATER YEAR (WY)#

MEAN	1161	673	338	277	239	240	590	2800	902	831	1140	1231
MAX	1748	2669	561	393	362	332	1215	4367	1911	2580	2714	2561
(WY)	2000	1980	1980	1980	1980	1980	1980	1985	1985	1981	1981	1982
MIN	480	277	218	191	182	177	215	1361	421	247	399	443
(WY)	1985	1986	1999	1999	1986	1982	1985	1986	1986	1983	2000	1984

See Period of Record
e Estimated

15294100 DESHKA RIVER NEAR WILLOW--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1979 - 2001#	
ANNUAL TOTAL	286777		285556			
ANNUAL MEAN	784		782		873	
HIGHEST ANNUAL MEAN					1242	
LOWEST ANNUAL MEAN					632	
HIGHEST DAILY MEAN					9440	
LOWEST DAILY MEAN	a260	May 5	4780	May 20	Nov 13 1979	
ANNUAL SEVEN-DAY MINIMUM	260	Feb 21	229	Jul 3	b160	
MAXIMUM PEAK FLOW			258	Jun 28	160	
MAXIMUM PEAK STAGE			4850	May 20	c48000	
INSTANTANEOUS LOW FLOW			4.62	May 20	d13.54	
ANNUAL RUNOFF (AC-FT)	568800		220	Jul 3	160	
ANNUAL RUNOFF (CFSM)	1.33		566400		632800	
ANNUAL RUNOFF (INCHES)	18.05		1.32		1.48	
10 PERCENT EXCEEDS	1470		17.97		20.08	
50 PERCENT EXCEEDS	400		2300		2120	
90 PERCENT EXCEEDS	260		400		429	
			260		210	

See Period of Record

a Feb. 21 to Mar. 28

b Feb. 24 to Mar. 8, 1986

c From rating curve extended above 6,430 ft³/s on basis of slope-area measurement of peak flow 7.0 mi upstream from station

d From floodmarks

15294100 DESHKA RIVER NEAR WILLOW--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1981 to 1984, 1998 to September 2001 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: January 1999 to September 2001.

INSTRUMENTATION.-- Electronic water-temperature recorder since January 1999, set for 15-minute recording interval.

REMARKS.--

WATER TEMPERATURE: Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the average of the stream by cross section measurements on March 13, May 15, and June 11. No variation was found within the cross sections. No variation was found between mean stream temperature and temperature at the sensor.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 24.0 °C, July 7, 1999; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 23.5 °C, June 28; minimum, 0.0°C on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

		SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)					
MAR													
13...	1300	7.00	72	7.0	0	762	8.5	58.1					
13...	1302	35.0	72	7.1	0	762	8.4	57.4					
13...	1304	63.0	73	7.2	0	762	8.3	56.8					
13...	1306	91.0	73	7.2	0	762	8.4	57.5					
13...	1308	119	74	7.2	0	762	8.5	58.1					
13...	1310	140	75	7.2	0	762	8.4	57.5					
MAY													
15...	1245	20.0	21	6.7	6.5	751	11.2	92.4					
15...	1246	65.0	21	6.7	6.5	751	11.0	90.8					
15...	1247	110	21	6.7	6.5	751	11.0	90.8					
15...	1248	155	21	6.7	6.5	751	11.0	90.8					
15...	1249	200	21	6.7	6.5	751	10.9	89.9					
JUN													
11...	1423	15.0	51	7.5	16.0	762	9.7	98.3					
11...	1425	45.0	51	7.4	16.0	762	9.6	97.2					
11...	1426	75.0	51	7.4	16.0	762	9.6	97.2					
11...	1428	105	51	7.4	16.0	762	9.6	97.2					
11...	1430	135	51	7.3	16.0	762	9.6	97.2					
						DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM- PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	PURPOSE SITE VISIT (CODE) (50280)	QUALITY ASSUR- ANCE DATA INDICA- TOR CODE (99111)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPERA- TURE AIR (DEG C) (00020)
DATE	TIME	MEDIUM CODE	SAMPLE TYPE	STREAM WIDTH (FT) (00004)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM- PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	PURPOSE SITE VISIT (CODE) (50280)	QUALITY ASSUR- ANCE DATA INDICA- TOR CODE (99111)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPERA- TURE AIR (DEG C) (00020)
OCT													
06...	1300	9	9	160	1.90	737	10	3045	1001	--	49	7.6	--
NOV													
14...	1050	9	9	E160	--	--	10	3045	1001	--	48	7.0	--
FEB													
02...	1440	9	9	142	--	262	10	3045	1001	--	73	7.4	--
MAR													
13...	1200	9	9	143	--	286	10	3045	1001	--	73	7.0	5.5
MAY													
08...	1720	9	9	205	3.10	2270	10	3053	1001	--	23	6.6	8.5
15...	1240	9	9	222	4.07	3880	10	3039	1001	--	21	6.7	--
JUN													
11...	1350	9	7	150	1.85	659	10	3045	1001	30	51	7.4	15.0
JUL													
02...	1330	9	9	160	1.26	230	10	3045	1001	--	77	7.4	20.0
AUG													
15...	1230	D	9	--	--	--	--	8010	1099	--	--	--	--
15...	1620	9	9	133	1.46	331	10	3045	1001	--	64	7.3	18.0
SEP													
07...	1450	9	9	191	3.60	3120	10	3053	1003	--	28	6.7	18.5

15294100 DESHKA RIVER NEAR WILLOW--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TEMP- ERATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MMOF HG) (00025)	OXYGEN DIS- OLVED (MG/L) (00300)	OXYGEN, DIS- OLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM DIS- SOLVED (MG/L AS NA) (00930)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICARBO NATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT FIELD MG/S AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
OCT 06...	--	744	--	--	27	7.62	1.84	1.9	29	.85	33	28	.6
NOV 14...	.00	757	12.8	88	20	5.86	1.36	1.6	23	.67	26	21	.6
FEB 02...	.00	760	8.1	56	34	9.74	2.34	2.2	38	.86	43	36	.7
MAR 13...	.00	762	8.4	57	34	9.83	2.30	2.3	38	.91	44	37	.8
MAY 08...	3.5	760	11.5	87	13	3.90	.887	1.2	13	.61	15	12	.2
15...	6.5	751	11.0	91	9	2.73	.645	.9	10	.35	10	8	.2
JUN 11...	16.0	762	9.6	97	23	6.75	1.59	1.8	25	.74	28	23	.4
JUL 02...	20.0	769	8.7	95	35	10.1	2.36	2.4	36	.93	41	34	.4
AUG 15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	16.0	763	9.5	96	29	8.51	1.96	2.0	35	.74	41	34	.5
SEP 07...	10.5	760	10.6	95	13	3.89	.899	1.1	10	.55	12	10	.3

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLOU- RIDE DIS- SOLVED (MG/L AS F) (00950)	SIL- ICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOL- IDS, RISI- DUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOL- IDS, SUM OF CON- STITU- ENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMO- NIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMO- NIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMO- NIA + ORGANIC DIS. TOTAL (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
OCT 06...	.7	<.2	14.2	60	45	.002	.107	.035	.27	.24	.041	.019	.013
NOV 14...	.6	E.1	13.6	53	41	.006	.764	<.002	E.38	.23	E.027	.012	.092
FEB 02...	.6	E.1	19.7	66	59	.001	.159	.015	.17	.16	.030	.018	.015
MAR 13...	.8	<.2	19.0	65	59	.001	.133	.025	.20	.14	.030	.017	.013
MAY 08...	.3	<.2	9.6	47	25	.001	.049	.006	.31	.21	.045	.011	<.007
15...	.2	<.2	8.2	51	19	.002	.066	.008	.40	.26	.080	.011	<.007
JUN 11...	.2	<.2	12.7	51	39	.001	.017	.007	.36	.23	.030	.013	E.005
JUL 02...	.4	<.2	14.9	68	52	<.001	.009	<.002	.18	.15	.014	.011	E.004
AUG 15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	.4	E.1	14.6	55	50	.002	.056	.005	.23	.21	.025	.012	.008
SEP 07...	.5	<.2	9.6	50	24	.004	.030	.006	.53	.42	.088	.015	<.007

15294100 DESHKA RIVER NEAR WILLOW--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CAR- BON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CAR- BON, INOR- GANIC, PAR- TIC. TOTAL (MG/L AS C) (00688)	CAR- BON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	CAR- BON, INORG + ORGANIC PAR- TIC. TOTAL (MG/L AS C) (00694)	NITRO- GEN, PARTIC- ULATE WAT FLT SUSP (MG/L AS N) (49570)	CHLOR-A PERIPH- YTON CHROMO- GRAPHIC FLUO- ROM (MG/M2) (70957)	PERIPH- YTON BIO- MASS ASH WEIGHT G/SQ M (00572)	PERIPH- YTON BIO- MASS DRY WEIGHT G/SQ M (00573)	PHEO- PHYTTIN A, PERI- PHYTON (MG/M2) (62359)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
OCT 06...	820	111	5.1	<.1	.6	.6	.070	--	--	--	--	7	14
NOV 14...	680	52.9	6.6	<.1	.5	E.5	E.046	--	--	--	--	--	--
FEB 02...	790	95.0	3.1	--	--	.3	<.022	--	--	--	--	3	2.1
MAR 13...	690	83.9	2.9	<.1	<.1	.3	<.022	--	--	--	--	3	2.3
MAY 08...	660	44.5	8.6	--	--	1.0	E.086	--	--	--	--	23	141
15...	440	26.2	8.1	--	--	1.4	.135	--	--	--	--	56	587
JUN 11...	520	44.8	5.2	--	--	.5	.052	--	--	--	--	4	7.1
JUL 02...	550	33.8	4.2	--	--	E.2	<.022	--	--	--	--	2	1.2
AUG 15...	--	--	--	--	--	--	--	21.1	140.1	151.0	8.2	--	--
15...	660	34.8	5.1	--	--	.2	<.022	--	--	--	--	4	3.6
SEP 07...	550	34.4	14	--	--	2.6	.226	--	--	--	--	33	278

DATE	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 06...	76
NOV 14...	--
FEB 02...	84
MAR 13...	84
MAY 08...	58
15...	51
JUN 11...	82
JUL 02...	--
AUG 15...	--
15...	--
SEP 07...	39

15294100 DESHKA RIVER NEAR WILLOW--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	3.0	2.0	2.5	.5	.5	.5	.5	.0	.5	.0	.0	.0
2	2.5	1.5	2.0	.5	.5	.5	.5	.0	.5	.0	.0	.0
3	2.5	1.5	2.0	.5	.5	.5	.5	.0	.0	.0	.0	.0
4	3.5	2.0	2.5	.5	.5	.5	.5	.0	.0	.0	.0	.0
5	3.5	2.5	3.0	.5	.5	.5	.0	.0	.0	.0	.0	.0
6	4.5	3.0	3.5	.5	.5	.5	.5	.0	.0	.0	.0	.0
7	4.5	3.5	4.0	.5	.5	.5	.0	.0	.0	.0	.0	.0
8	4.5	4.0	4.5	.5	.5	.5	.0	.0	.0	.0	.0	.0
9	4.0	3.5	4.0	.5	.0	.0	.0	.0	.0	.0	.0	.0
10	3.5	2.0	2.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
11	3.0	2.0	2.5	.5	.0	.0	.0	.0	.0	.0	.0	.0
12	2.5	1.5	2.0	.5	.5	.5	.0	.0	.0	.0	.0	.0
13	2.5	1.0	2.0	.5	.5	.5	.0	.0	.0	.0	.0	.0
14	3.0	2.5	2.5	.5	.0	.0	.0	.0	.0	.0	.0	.0
15	3.5	2.5	3.0	.5	.5	.5	.0	.0	.0	.0	.0	.0
16	3.5	3.0	3.0	.5	.5	.5	.0	.0	.0	.0	.0	.0
17	3.5	2.5	3.0	.5	.0	.5	.0	.0	.0	.0	.0	.0
18	3.0	2.5	2.5	.5	.0	.0	.0	.0	.0	.0	.0	.0
19	2.5	1.5	2.0	.5	.0	.0	.0	.0	.0	.0	.0	.0
20	1.5	.0	.5	.5	.0	.5	.0	.0	.0	.0	.0	.0
21	.5	.0	.5	.5	.0	.5	.0	.0	.0	.0	.0	.0
22	.5	.0	.0	.5	.5	.5	.0	.0	.0	.0	.0	.0
23	.5	.0	.0	.5	.5	.5	.0	.0	.0	.0	.0	.0
24	.5	.0	.5	.5	.5	.5	.0	.0	.0	.0	.0	.0
25	.5	.0	.0	.5	.5	.5	.0	.0	.0	.0	.0	.0
26	.5	.0	.5	.5	.5	.5	.0	.0	.0	.0	.0	.0
27	.5	.5	.5	.5	.0	.5	.0	.0	.0	.0	.0	.0
28	.5	.5	.5	.5	.0	.0	.0	.0	.0	.0	.0	.0
29	.5	.5	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
30	.5	.5	.5	.5	.0	.0	.0	.0	.0	.0	.0	.0
31	.5	.0	.5	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	4.5	.0	1.9	.5	.0	.3	.5	.0	.0	.0	.0	.0

15294100 DESHKA RIVER NEAR WILLOW--Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.0	1.5	2.0
2	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.5	.0	.5
3	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.5	.0	1.0
4	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.5	1.0	2.0
5	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.5	1.5	2.0
6	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.0	2.0	2.5
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.5	2.5	3.0
8	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.0	2.5	3.5
9	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.5	3.5	4.0
10	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.0	3.0	3.5
11	.0	.0	.0	.0	.0	.0	.0	.0	.0	5.0	3.0	4.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	5.5	3.5	4.5
13	.0	.0	.0	.0	.0	.0	.0	.0	.0	6.5	4.5	5.5
14	.0	.0	.0	.0	.0	.0	.0	.0	.0	7.5	5.5	6.5
15	.0	.0	.0	.0	.0	.0	.0	.0	.0	7.0	6.0	6.5
16	.0	.0	.0	.0	.0	.0	.0	.0	.0	6.5	5.5	6.0
17	.0	.0	.0	.0	.0	.0	.0	.0	.0	6.5	4.5	5.5
18	.0	.0	.0	.0	.0	.0	.0	.0	.0	7.5	5.5	6.5
19	.0	.0	.0	.0	.0	.0	.0	.0	.0	7.5	6.0	7.0
20	.0	.0	.0	.0	.0	.0	.0	.0	.0	8.0	6.5	7.5
21	.0	.0	.0	.0	.0	.0	.0	.0	.0	8.0	6.5	7.5
22	.0	.0	.0	.0	.0	.0	.0	.0	.0	8.0	7.0	7.5
23	.0	.0	.0	.0	.0	.0	.0	.0	.0	8.0	7.0	7.5
24	.0	.0	.0	.0	.0	.0	.0	.0	.0	8.0	7.0	7.5
25	.0	.0	.0	.0	.0	.0	.0	.0	.0	7.5	6.5	7.0
26	.0	.0	.0	.0	.0	.0	.0	.0	.0	8.0	7.0	7.5
27	.0	.0	.0	.0	.0	.0	1.0	.0	.0	10.0	7.0	8.5
28	.0	.0	.0	.0	.0	.0	1.5	.0	.5	11.5	9.0	10.5
29	---	---	---	.0	.0	.0	2.5	.5	1.5	11.5	10.0	11.0
30	---	---	---	.0	.0	.0	3.0	1.0	2.0	11.0	10.0	11.0
31	---	---	---	.0	.0	.0	---	---	---	11.5	10.5	11.0
MONTH	.0	.0	.0	.0	.0	.0	3.0	.0	.1	11.5	.0	5.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	13.0	10.5	11.5	21.5	17.0	19.0	16.0	13.5	15.0	13.0	11.5	12.5
2	15.5	12.5	13.5	22.0	17.5	19.5	17.5	15.5	16.5	13.0	11.5	12.0
3	16.0	14.0	15.0	19.5	16.0	18.0	17.5	15.5	16.5	14.5	11.5	12.5
4	15.5	13.5	14.5	17.5	15.0	16.0	16.5	15.0	15.5	13.0	11.5	12.0
5	14.0	13.0	13.5	17.0	14.0	15.5	16.5	15.0	15.5	12.0	10.5	11.5
6	13.5	10.0	12.5	17.0	14.5	16.0	17.0	15.0	16.0	11.0	10.0	10.5
7	13.0	10.0	11.5	18.5	15.5	17.0	18.0	15.5	16.5	11.0	10.0	10.5
8	14.0	11.0	12.5	17.5	16.0	16.5	17.0	16.5	17.0	11.0	9.0	10.0
9	16.0	13.0	14.5	19.0	14.5	17.0	17.0	16.0	16.5	10.5	8.5	10.0
10	17.5	14.5	16.0	17.5	15.0	16.5	16.0	15.5	16.0	10.5	8.5	9.5
11	16.5	14.5	16.0	16.0	14.5	15.0	17.5	15.0	16.0	10.0	7.5	9.0
12	15.0	13.5	14.5	15.5	14.0	15.0	19.0	16.0	17.0	10.0	9.5	9.5
13	15.5	13.5	14.5	15.0	13.0	14.0	20.5	16.0	18.0	10.5	9.0	10.0
14	17.0	13.5	15.0	16.5	14.5	15.5	18.5	16.5	17.5	11.0	9.5	10.0
15	18.5	15.0	16.5	16.5	15.5	16.0	16.5	15.0	16.0	11.5	9.5	10.5
16	20.0	16.0	17.5	17.0	14.5	16.0	16.0	14.5	15.0	10.5	9.0	10.0
17	20.5	17.0	18.5	17.5	16.0	16.5	15.5	14.0	15.0	12.0	9.0	10.5
18	20.0	16.5	18.0	19.0	15.0	17.0	16.0	14.0	15.0	11.5	10.0	10.5
19	20.5	17.0	18.5	18.5	17.0	18.0	16.0	14.0	14.5	12.0	10.0	11.0
20	21.5	17.0	19.0	18.5	16.5	17.5	15.5	13.5	14.5	12.5	10.0	11.0
21	21.5	18.0	19.5	18.0	17.0	17.5	16.0	14.0	15.0	11.0	8.5	10.0
22	22.0	17.0	19.5	18.5	16.5	17.5	17.0	15.0	15.5	9.5	7.0	8.5
23	23.0	18.0	20.5	17.5	16.5	17.0	16.0	15.0	15.5	9.0	7.5	8.5
24	22.5	19.0	20.5	17.0	15.5	16.0	16.0	14.5	15.0	9.5	8.0	8.5
25	23.0	18.5	20.5	17.0	16.0	16.0	17.0	14.5	15.5	10.0	8.5	9.0
26	23.0	19.0	21.0	18.5	15.5	17.0	16.0	15.0	15.5	10.0	7.5	8.5
27	23.0	19.0	20.5	18.5	16.0	17.5	16.5	14.5	15.5	8.5	7.0	8.0
28	23.5	18.5	20.5	17.5	16.0	17.0	15.5	14.0	14.5	7.5	6.5	7.0
29	22.0	18.5	20.5	16.0	15.0	15.5	14.0	12.5	13.5	7.5	5.5	6.5
30	20.5	18.0	19.0	15.0	13.5	14.5	14.0	12.5	13.0	6.5	5.0	6.0
31	---	---	---	15.5	13.0	14.5	14.5	12.0	13.0	---	---	---
MONTH	23.5	10.0	16.8	22.0	13.0	16.5	20.5	12.0	15.5	14.5	5.0	9.8

15294700 JOHNSON RIVER ABOVE LATERAL GLACIER NEAR TUXEDNI BAY

LOCATION.--Lat 60°05'41", long 152°54'38", in SW¹/₄ NW¹/₄ NW¹/₄ sec. 16, T. 1 S., R. 21 W. (Kenai A-8 quad), Kenai Peninsula Borough, Hydrologic Unit 19020602, on the right bank about 20 mi upstream from mouth, 10 mi south of Tuxedni Bay, and 60 mi northeast of Iliamna.

DRAINAGE AREA.--24.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1995 to current year (no winter record).

GAGE.--Water-stage recorder. Elevation of gage is 450 ft above sea level, from topographic map. July 1995 to June 1996, at site 300 ft downstream at same datum.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 8,800 ft³/s, September 21, 1995 from rating curve extended above 3,500 ft³/s on the basis of slope-area measurement, gage height 14.60 ft at site then in use, gage height 16.27 ft at the current site; minimum not determined, occurs during the winter.

EXTREMES FOR CURRENT PERIOD.--Maximum discharge for the period October 2000 and May through September 2001, 4,690 ft³/s, July 19 gage height, 14.35 ft; minimum not determined, occurs during the winter.

REMARKS.--Records are fair except for estimated discharges, which are poor. Rain gage at station. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	---	---	---	---	---	---	e85	463	910	833	703
2	91	---	---	---	---	---	---	e85	523	933	836	556
3	86	---	---	---	---	---	---	e85	559	908	742	506
4	111	---	---	---	---	---	---	e90	533	819	668	648
5	176	---	---	---	---	---	---	e90	506	807	651	604
6	324	---	---	---	---	---	---	e95	463	996	673	434
7	354	---	---	---	---	---	---	e100	474	1020	684	345
8	195	---	---	---	---	---	---	e100	484	907	634	300
9	133	---	---	---	---	---	---	e100	528	865	573	264
10	111	---	---	---	---	---	---	e110	581	854	581	250
11	100	---	---	---	---	---	---	e110	613	893	666	230
12	90	---	---	---	---	---	---	e120	613	1030	853	355
13	88	---	---	---	---	---	---	e120	603	925	908	591
14	191	---	---	---	---	---	---	e130	684	858	816	508
15	167	---	---	---	---	---	---	e140	807	884	754	462
16	182	---	---	---	---	---	---	e140	832	940	654	405
17	139	---	---	---	---	---	---	e140	816	985	714	430
18	112	---	---	---	---	---	---	e150	799	956	766	432
19	95	---	---	---	---	---	---	e150	790	2960	947	411
20	83	---	---	---	---	---	---	e150	851	2270	1340	481
21	76	---	---	---	---	---	---	e160	942	1750	1170	520
22	72	---	---	---	---	---	---	e170	994	1470	937	407
23	65	---	---	---	---	---	---	e180	1090	1190	695	564
24	e65	---	---	---	---	---	---	192	1100	1040	762	714
25	e65	---	---	---	---	---	---	202	1080	950	742	428
26	65	---	---	---	---	---	---	218	1250	903	623	340
27	62	---	---	---	---	---	---	212	1340	932	605	287
28	60	---	---	---	---	---	---	254	1310	867	1190	266
29	59	---	---	---	---	---	---	291	1180	821	1040	267
30	57	---	---	---	---	---	---	311	1030	834	1300	223
31	47	---	---	---	---	---	---	339	---	827	1030	---
TOTAL	3619	---	---	---	---	---	---	4819	23838	33304	25387	12931
MEAN	117	---	---	---	---	---	---	155	795	1074	819	431
MAX	354	---	---	---	---	---	---	339	1340	2960	1340	714
MIN	47	---	---	---	---	---	---	85	463	807	573	223
AC-FT	7180	---	---	---	---	---	---	9560	47280	66060	50360	25650
CFSM	4.71	---	---	---	---	---	---	6.27	32.0	43.3	33.0	17.4
IN.	5.43	---	---	---	---	---	---	7.23	35.76	49.96	38.08	19.40

e Estimated

15294700 JOHNSON RIVER ABOVE LATERAL GLACIER NEAR TUXEDNI BAY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1998 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

				DIS- CHARGE INST. CUBIC FEET PER SECOND (00061)	SAM- PLING METHOD, CODES (82398)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN DIS- OLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CONDUCT ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
MAY 2001													
23...	1300	9	9	174	10	752	14.2	102	7.2	93	1.2	39	13.8
JUN													
26...	1230	9	9	1220	10	762	12.8	94	7.2	45	2.5	18	6.38
AUG													
01...	1430	9	9	827	10	757	12.9	104	7.1	38	5.8	15	5.34
SEP													
03...	1130	9	9	693	10	745	11.5	90	7.2	46	4.3	19	6.68
27...	1130	9	9	280	10	745	13.3	102	6.9	58	3.3	25	8.69
	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00935)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	SODIUM DIS- SOLVED (MG/L AS NA) (00930)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	ALKA- LINITY WAT DIS TOT IT FIELD CACO3 (39086)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SIL- ICA, DIS- SOLVED (MG/L AS SIO2) (00955)
MAY 2001													
23...	--	1.04	--	.31	--	1.8	--	18	20	23	2.0	<.2	4.7
JUN													
26...	7.62	.581	2.05	.27	.5	.9	1.2	12	12	16	.7	<.2	2.7
AUG													
01...	6.26	.453	1.39	.27	.4	.6	.6	10	12	13	.5	<.2	2.0
SEP													
03...	6.40	.541	.72	.21	<.1	.7	1.5	12	13	16	.5	<.2	2.4
27...	8.31	.719	.83	.24	.3	.9	1.0	14	16	18	.5	<.2	3.2
	SUL- FATE DIS- SOLVED (MG/L AS SO4) (00945)	SOL- IDS, RISI- DUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOL- IDS, SUM OF CON- STITU- ENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMO- NIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMO- NIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, AMMO- NIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, PARTI- CULTE WAT FLT SUSP (MG/L AS N) (49570)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CAR- BON, INORG + ORGANIC PAR- TIC. TOTAL (MG/L AS C) (00694)
MAY 2001													
23...	17.8	44	54	<.002	<.10	<.08	.181	<.001	<.022	<.006	<.007	.017	.1
JUN													
26...	5.9	23	26	.002	<.10	E.06	.079	<.001	.030	E.003	<.007	.059	.3
AUG													
01...	5.3	20	21	<.002	<.10	<.08	.025	<.001	.043	<.006	<.007	.042	.4
SEP													
03...	7.0	20	26	E.005	E.06	<.08	E.023	<.001	<.022	<.006	<.007	.012	.1
27...	10.8	34	34	.002	<.10	<.08	.024	.001	<.022	<.006	<.007	.006	<.1

15294700 JOHNSON RIVER ABOVE LATERAL GLACIER NEAR TUXEDNI BAY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	CAR- BON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	ALUMI- NUM, DIS- SOLVED (UG/L AS AL) (01106)	ALUMI- NUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	ARSENIC TOTAL SOLVED (UG/L AS AS) (01002)	BAR- IUM, DIS- SOLVED (UG/L AS BA) (01005)	BAR- IUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CAD- MIUM, DIS- SOLVED (UG/L AS CD) (01025)	CAD- MIUM WATER UNFIL- TERED TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)
MAY 2001													
23...	E.24	11	--	.4	--	14.9	--	<.06	--	54	E.03	--	E.4
JUN 26...	E.19	33	4070	.5	E1	8.8	27.0	<.06	<2.50	17	E.03	E.07	<.8
AUG 01...	<.30	21	2570	.7	E1	6.3	15.7	<.06	<2.50	16	<.04	<.10	<.8
SEP 03...	<.30	20	706	.8	M	6.9	10	<.06	<2.50	19	E.02	E.05	<.8
27...	<.30	19	353	.8	E1	8.7	10.1	<.06	<2.50	33	.04	<.10	<.8
DATE	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO) (01037)	COP- PER, DIS- SOLVED (UG/L AS CU) (01040)	COP- PER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LITH- IUM DIS- SOLVED (UG/L AS LI) (01130)	LITH- IUM TOTAL RECOV- ERABLE (UG/L AS LI) (01132)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)
MAY 2001													
23...	--	.12	--	.6	--	<10	--	<.08	--	1.4	--	3.1	--
JUN 26...	M	.07	E2	.6	<20.0	10	3510	E.06	<1	E.2	<7.0	4.9	79
AUG 01...	<1	.04	E1	.5	<20.0	<10	2240	<.08	<1	E.2	<7.0	4.8	52
SEP 03...	<1	.04	<2	<.2	<20.0	M	540	<.08	<1	E.2	<7.0	2.6	16
27...	<1	.07	<2	.4	<20.0	<10	310	<.08	<1	.4	<7.0	2.2	8
DATE	MER- CURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO) (01062)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	SIL- VER, DIS- SOLVED (UG/L AS AG) (01075)	SIL- VER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR) (01082)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS AN) (01090)
MAY 2001													
23...	--	.4	--	.18	--	<.3	--	<1.0	--	26.3	--	E.2	4
JUN 26...	.03	.3	<1.5	.15	<2	<.3	<3.0	<1.0	<.40	12.5	18.9	.5	3
AUG 01...	<.01	.4	E.8	<.06	<2	<.3	E.2	<1.0	<.40	10.6	14.5	.5	3
SEP 03...	<.01	.4	<1.5	<.06	<2	E.2	<3.0	<1.0	<.40	12.5	13.2	.6	4
27...	<.01	.6	E1.1	<.06	<2	<.3	<3.0	<1.0	<.40	16.9	17.4	.6	8
DATE	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	SEDI- MENT, DIS- SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- SUS- PENDE (T/DAY) (80155)	PURPOSE SITE VISIT, (CODE) (50280)	SAMPLER TYPE (CODE) (84164)							
MAY 2001													
23...	--	<.02	25	12	1099	3045							
JUN 26...	E23	<.02	118	387	1099	3045							
AUG 01...	E17	<.02	75	167	1099	3045							
SEP 03...	<31	<.02	16	30	1099	3045							
27...	<31	.04	5	3.8	1099	3045							

15295700 TERROR RIVER AT MOUTH NEAR KODIAK

LOCATION.--Lat 57°41'41", long 153°09'42", in SW¹/₄ NE¹/₄ sec. 5, T. 29 S., R. 24 W. (Kodiak C-4 quad), Kodiak Island Borough, Hydrologic Unit 19020701, on Kodiak Island, in Kodiak National Wildlife Refuge, on right bank, 0.9 mi upstream from mouth, 7.5 mi downstream from Terror Lake Dam, and 29 mi southwest of Kodiak.

DRAINAGE AREA.--30.7 mi², 45.7 mi² prior to partial diversion of Terror Lake to hydropower plant in February 1985.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1964 to October 1968, October 1981 to current year.

REVISED RECORDS.--WDR AK-84-1: 1982-83. WDR AK-96-1: 1995(M).

GAGE.--Water-stage recorder. Elevation of gage is 30 ft above sea level, from topographic map. Prior to October 1, 1981 at site 0.2 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records fair. Flow from 15 mi² at headwaters regulated by Terror Lake Dam and some flow diverted from Terror Lake to Kizhuyak River. Regulation for construction began in November 1982. Began filling reservoir April 29, 1984. Diversion to hydropower plant began February 12, 1985. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	161	156	116	139	77	88	113	166	421	393	310	200
2	161	150	127	119	86	89	128	169	411	391	299	209
3	162	137	127	105	79	91	147	168	422	406	280	208
4	196	138	131	99	91	116	131	167	667	435	497	227
5	231	138	176	94	95	116	125	164	566	451	355	212
6	217	156	134	121	86	95	124	167	525	455	285	194
7	244	218	119	100	87	93	124	167	479	401	267	197
8	204	171	113	87	89	94	127	164	430	348	263	197
9	188	217	115	86	88	95	130	162	414	369	298	190
10	201	290	129	100	88	102	156	162	427	407	281	201
11	193	205	119	102	99	118	151	168	447	417	256	215
12	186	170	117	89	90	113	127	174	440	411	244	208
13	198	266	216	93	81	94	123	185	424	370	249	192
14	188	193	251	149	87	98	123	207	455	346	252	181
15	180	180	161	246	75	96	124	226	447	478	253	193
16	193	241	123	168	105	84	120	295	492	513	267	332
17	189	216	127	524	151	85	118	314	516	415	357	312
18	181	175	126	407	105	85	124	264	479	487	294	240
19	177	142	169	218	156	90	123	238	492	878	254	209
20	177	173	289	265	98	92	130	308	537	491	615	255
21	199	271	196	190	86	98	139	584	546	393	439	731
22	191	240	145	136	89	97	157	402	563	401	296	1000
23	189	205	126	108	96	97	134	294	541	399	224	550
24	224	283	206	100	99	113	130	264	487	335	202	557
25	243	200	332	93	104	97	129	253	456	288	234	503
26	209	157	215	103	102	95	140	245	506	277	220	375
27	200	137	186	91	124	84	136	218	608	281	256	349
28	192	133	346	92	95	85	134	236	659	277	264	313
29	197	107	350	86	---	87	142	313	557	288	215	358
30	232	109	227	94	---	83	135	344	460	325	217	283
31	191	---	175	88	---	91	---	380	---	312	197	---
TOTAL	6094	5574	5489	4492	2708	2961	3944	7568	14874	12438	8940	9391
MEAN	197	186	177	145	96.7	95.5	131	244	496	401	288	313
MAX	244	290	350	524	156	118	157	584	667	878	615	1000
MIN	161	107	113	86	75	83	113	162	411	277	197	181
AC-FT	12090	11060	10890	8910	5370	5870	7820	15010	29500	24670	17730	18630

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2001, BY WATER YEAR (WY)#

MEAN	274	184	145	121	110	101	172	324	500	369	290	295
MAX	427	354	313	153	168	152	247	454	872	1070	662	707
(WY)	1995	1987	1986	1988	1994	1998	1993	1993	1987	1987	1988	1995
MIN	192	93.8	78.4	81.8	72.6	60.9	115	244	305	228	183	175
(WY)	1998	1995	1988	1989	1989	1986	1986	2000	1990	1989	1994	2000

See Period of Record and Remarks

15295700 TERROR RIVER AT MOUTH NEAR KODIAK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1986 - 2001#	
ANNUAL TOTAL	72075		84473			
ANNUAL MEAN	197		231		241	
HIGHEST ANNUAL MEAN					369	1987
LOWEST ANNUAL MEAN					193	2000
HIGHEST DAILY MEAN	1110	Jun 12	1000	Sep 22	4610	Sep 20 1995
LOWEST DAILY MEAN	85	Feb 19	75	Feb 15	a26	Dec 11 1996
ANNUAL SEVEN-DAY MINIMUM	88	Feb 14	86	Jan 29	39	Nov 19 1985
MAXIMUM PEAK FLOW			1730	Sep 22	b10000	Sep 19 1995
MAXIMUM PEAK STAGE			3.77	Sep 22	7.67	Sep 19 1995
INSTANTANEOUS LOW FLOW			67	Jan 9	a9.8	Dec 11 1996
ANNUAL RUNOFF (AC-FT)	143000		167600		174500	
10 PERCENT EXCEEDS	342		449		462	
50 PERCENT EXCEEDS	175		192		185	
90 PERCENT EXCEEDS	93		93		85	

PRIOR TO CONSTRUCTION OF TERROR LAKE DAM

SUMMARY STATISTICS, WATER YEARS 1965 - 1983 #

ANNUAL MEAN	293	
HIGHEST ANNUAL MEAN	421	1983
LOWEST ANNUAL MEAN	230	1967
HIGHEST DAILY MEAN	2600	Oct 2 1965
LOWEST DAILY MEAN	c19	Feb 23 1967
ANNUAL SEVEN-DAY MINIMUM	20	Feb 23 1967
INSTANTANEOUS PEAK FLOW	3820	Sep 26 1966
INSTANTANEOUS PEAK STAGE	d6.48	Sep 26 1966
INSTANTANEOUS PEAK STAGE	f7.54	Mar 28 1964
ANNUAL RUNOFF (AC-FT)	212200	
ANNUAL RUNOFF (CFSM)	9.54	
ANNUAL RUNOFF (IN)	129.66	
10 PERCENT EXCEEDS	774	
50 PERCENT EXCEEDS	157	
90 PERCENT EXCEEDS	39	

See Period of Record and Remarks

a Occurred while dam release valve was closed for repair

b From rating curve extended above 960 ft³/s on basis of slope-area measurement of peak flow

c Feb. 23 and Mar. 1, 1967

d Site and datum then in use

f Site and datum then in use; from tidal wave

15295700 TERROR RIVER AT MOUTH NEAR KODIAK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968, 1982 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: December 1981 to current year.

INSTRUMENTATION.--Water-temperature recorder since December 10, 1981. Electronic water temperature recorder set for 1-hour recording interval.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the average for the river by cross section on December 28, and July 17. No variation was found within the cross sections. No variation was found between mean stream temperature and sensor temperature.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 13.5°C, July 19, 1990 and August 8, 1993; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 11.0°C, August 7, 13 and 23; minimum, 0.0°C on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	STREAM WIDTH (FT) (000004)	SAMPLE LOC- ATION, CROSS SECTION (FT FM R BK) (72103)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)
DEC							
28...	1330	70.0	2.0	1.68	313	2.5	4.5
28...	1331	70.0	17.0	1.68	313	2.5	4.5
28...	1332	70.0	32.0	1.68	313	2.5	4.5
28...	1333	70.0	47.0	1.68	313	2.5	4.5
28...	1334	70.0	62.0	1.68	313	2.5	4.5
28...	1335	70.0	69.0	1.68	313	2.5	4.5
JUL							
17...	1155	71.5	4.5	1.84	388	6.0	19.5
17...	1156	71.5	18.5	1.84	388	6.0	19.5
17...	1157	71.5	33.5	1.84	388	6.0	19.5
17...	1158	71.5	48.5	1.84	388	6.0	19.5
17...	1159	71.5	63.5	1.84	388	6.0	19.5

15295700 TERROR RIVER AT MOUTH NEAR KODIAK--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	8.0	6.0	7.0	4.0	2.0	3.0	.5	.0	.5	1.5	1.0	1.5
2	8.5	7.5	8.0	5.0	4.0	4.0	1.0	.5	.5	2.0	1.0	1.5
3	8.5	7.0	8.0	4.0	3.0	3.5	1.5	1.0	1.5	1.5	.5	1.0
4	8.5	7.5	8.0	4.0	3.0	4.0	2.0	1.0	1.5	.5	.5	.5
5	8.5	7.5	7.5	4.5	3.5	4.0	2.0	1.5	2.0	.5	.0	.5
6	8.5	7.0	7.5	4.5	3.5	4.0	2.5	1.0	2.0	.5	.0	.5
7	7.5	6.0	7.0	4.0	3.0	3.5	2.0	1.0	1.5	1.0	.5	1.0
8	6.5	5.0	5.5	4.5	3.0	4.0	1.5	1.0	1.0	1.0	.5	.5
9	6.0	4.5	5.0	5.0	4.0	4.5	2.5	1.5	2.0	.5	.0	.5
10	7.0	5.0	6.0	4.5	3.5	4.0	2.0	1.5	2.0	.5	.0	.0
11	6.5	5.0	5.5	3.5	2.0	2.5	2.5	2.0	2.5	.5	.0	.5
12	6.5	4.5	5.5	3.5	2.5	3.0	3.0	2.5	2.5	1.0	.5	.5
13	7.0	4.5	5.5	4.0	2.5	3.5	2.5	2.0	2.5	1.0	.5	1.0
14	6.5	5.5	6.0	2.5	2.0	2.0	2.0	1.5	1.5	1.0	.5	.5
15	6.5	5.0	6.0	3.5	2.0	3.0	2.0	1.0	1.5	1.0	.0	.5
16	6.5	5.5	6.0	3.0	2.5	2.5	1.0	.5	.5	1.5	1.0	1.5
17	6.5	5.5	6.0	3.0	2.5	2.5	1.0	1.0	1.0	1.5	1.0	1.5
18	6.5	5.5	5.5	3.0	2.5	2.5	2.0	.5	1.5	2.0	1.5	1.5
19	6.0	4.5	5.0	3.0	2.0	2.5	2.5	2.0	2.0	2.0	1.5	1.5
20	5.5	4.5	5.0	3.5	2.0	3.0	2.5	2.0	2.0	2.0	1.5	2.0
21	5.0	4.0	5.0	3.0	2.5	3.0	2.0	1.5	1.5	1.5	1.0	1.5
22	5.5	4.0	5.0	3.0	2.5	3.0	2.0	2.0	2.0	2.0	1.0	1.5
23	4.5	3.5	4.0	3.0	2.5	2.5	2.5	2.0	2.5	1.5	.5	1.0
24	6.0	4.5	5.0	3.0	2.5	3.0	3.0	2.0	2.5	2.0	.5	1.0
25	5.0	3.5	4.0	2.5	2.0	2.5	2.5	2.0	2.0	1.5	.5	1.0
26	5.5	4.0	4.5	2.5	1.0	2.0	2.0	1.5	2.0	2.0	.5	1.0
27	5.0	4.0	4.5	2.0	.5	1.5	2.5	1.5	2.0	1.5	.5	1.0
28	5.0	3.5	4.0	2.0	1.0	2.0	3.0	2.5	2.5	1.5	.5	1.0
29	5.5	4.5	5.0	1.5	.5	1.0	2.5	1.5	2.0	1.0	.0	.5
30	5.0	3.5	4.0	.5	.5	.5	2.0	.5	2.0	.5	.0	.5
31	3.5	2.5	3.5	---	---	---	1.5	1.0	1.5	.5	.0	.5
MONTH	8.5	2.5	5.6	5.0	.5	2.9	3.0	.0	1.8	2.0	.0	.9

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	.5	.0	.5	1.5	.0	.5	3.0	.0	1.0	6.0	1.0	3.0
2	.5	.0	.5	1.0	.0	.5	3.5	1.0	2.0	4.0	2.0	2.5
3	.5	.0	.5	2.5	.5	1.5	3.5	1.0	2.0	4.0	.5	2.0
4	.5	.5	.5	1.5	1.0	1.5	3.5	.5	1.5	5.0	.5	2.0
5	1.0	.5	.5	2.5	1.0	1.5	4.0	.5	1.5	3.5	.5	2.0
6	2.0	.5	1.0	3.5	.5	1.5	4.0	1.0	2.0	4.0	1.5	2.5
7	1.0	.0	.5	2.0	.0	1.0	4.0	1.0	2.5	6.5	1.5	3.5
8	1.5	.0	.5	3.0	1.5	2.0	5.0	1.5	2.5	6.5	1.0	3.5
9	1.5	.5	1.0	3.5	2.0	2.5	4.0	1.5	2.5	4.5	2.0	3.0
10	2.5	.5	1.5	3.5	2.0	2.5	4.5	2.5	3.0	6.0	1.5	3.5
11	2.5	1.5	2.0	3.5	2.0	2.5	4.0	1.5	2.5	6.5	1.0	3.5
12	2.0	.5	1.5	4.0	2.0	2.5	4.0	.5	2.0	6.5	1.5	3.5
13	.5	.0	.5	3.0	.5	2.0	3.5	1.5	2.5	7.0	2.0	4.0
14	1.0	.0	.5	2.5	1.5	2.0	6.0	2.0	3.0	6.0	2.5	4.0
15	2.0	1.0	1.5	3.0	1.0	2.0	4.5	1.0	2.5	5.0	2.5	3.5
16	2.0	1.0	1.5	3.0	1.5	2.0	4.5	2.0	3.0	4.5	2.5	3.5
17	2.0	1.0	1.5	3.0	1.5	2.0	4.5	2.0	3.0	6.0	3.0	4.0
18	2.5	1.0	1.5	3.0	.5	1.5	4.5	1.5	3.0	7.5	2.5	4.5
19	2.0	.5	1.5	2.0	.0	1.0	4.5	1.0	2.5	8.5	2.0	4.5
20	2.0	.5	1.0	2.5	.0	1.0	4.0	2.0	3.0	4.0	3.0	3.5
21	1.0	.0	.5	1.5	.0	.5	5.0	2.0	3.5	4.5	3.0	3.5
22	.5	.0	.5	1.5	.0	.5	5.5	2.5	4.0	6.5	2.5	4.0
23	1.0	.0	.5	1.0	.0	.0	6.0	1.5	3.5	7.0	2.5	4.5
24	1.0	.0	.5	.5	.0	.5	6.0	2.5	4.0	6.5	3.0	4.5
25	2.0	1.0	1.5	2.5	.5	1.5	5.0	2.0	3.5	8.0	2.5	5.0
26	2.0	.5	1.0	3.5	1.0	2.0	5.0	2.5	3.5	5.0	3.0	4.0
27	2.0	.5	1.5	4.0	.5	1.5	7.0	2.0	4.0	8.5	3.0	5.5
28	1.5	.0	.5	3.5	.0	1.5	5.5	2.0	3.5	8.5	3.0	5.5
29	---	---	---	3.0	.5	1.5	4.5	2.5	3.5	8.5	3.5	5.5
30	---	---	---	2.5	.0	1.0	6.0	2.0	4.0	8.0	2.5	5.0
31	---	---	---	2.0	.0	.5	---	---	---	8.5	3.0	5.0
MONTH	2.5	.0	.9	4.0	.0	1.4	7.0	.0	2.8	8.5	.5	3.8

15295700 TERROR RIVER AT MOUTH NEAR KODIAK--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	8.0	2.5	5.0	8.0	3.5	5.5	10.0	5.5	7.5	9.5	6.0	7.5
2	8.5	2.5	5.0	8.5	3.5	5.5	9.0	5.5	7.0	9.5	7.0	8.0
3	5.5	2.5	4.0	6.5	4.0	5.0	7.5	6.0	6.5	9.0	7.0	8.0
4	4.5	3.0	3.5	7.5	4.0	5.5	7.0	6.0	6.5	8.5	7.0	7.5
5	5.0	2.5	3.5	6.5	4.5	5.0	9.0	5.5	7.0	7.5	6.5	7.0
6	5.0	3.0	4.0	7.5	4.0	5.5	10.0	5.5	7.5	7.0	5.5	6.0
7	5.0	3.0	4.0	7.5	3.5	5.5	11.0	6.0	8.0	8.5	6.0	7.0
8	6.5	3.0	4.5	8.5	4.0	6.0	10.5	6.0	8.0	8.0	5.0	6.5
9	8.0	2.5	5.0	9.0	4.0	6.0	8.5	7.0	7.5	8.0	4.5	6.0
10	8.5	3.0	5.0	6.0	4.5	5.5	8.5	6.5	7.5	7.5	6.5	7.0
11	8.0	3.0	5.0	7.0	4.5	5.5	10.0	6.5	8.0	7.0	6.0	6.5
12	5.5	3.0	4.5	6.5	4.5	5.5	10.5	6.5	8.0	7.0	6.0	6.5
13	8.0	3.5	5.5	6.0	4.0	5.0	11.0	6.5	8.5	8.0	5.5	6.5
14	8.0	2.5	5.0	9.0	5.0	6.5	10.5	7.0	8.5	8.0	5.5	6.5
15	8.0	3.0	5.0	6.5	5.0	5.5	9.5	7.5	8.5	7.0	6.5	6.5
16	8.0	3.5	5.0	7.5	5.0	5.5	9.0	7.5	8.0	8.0	7.0	7.5
17	7.5	3.0	5.0	8.0	4.0	6.0	8.5	7.5	8.0	8.0	7.0	7.5
18	6.5	3.0	4.5	8.0	5.0	6.5	9.5	7.0	8.0	8.5	7.0	7.5
19	6.5	3.5	4.5	6.5	5.0	5.5	8.5	6.5	7.5	8.0	6.5	7.0
20	6.0	3.5	4.5	8.0	4.0	6.0	7.5	7.0	7.5	7.5	5.5	6.5
21	8.0	3.0	5.0	7.5	5.0	6.0	10.0	6.0	7.5	7.0	5.5	6.5
22	8.0	3.5	5.0	7.5	5.5	6.5	10.0	6.0	8.0	8.0	6.0	7.0
23	7.5	3.5	5.0	7.0	5.0	6.0	11.0	7.0	8.5	6.5	5.5	6.0
24	7.5	3.0	5.0	7.0	5.5	6.0	8.5	7.0	8.0	6.5	5.5	6.0
25	8.5	3.5	5.5	7.5	5.5	6.5	8.5	7.5	8.0	7.5	6.0	6.5
26	8.0	3.5	5.5	8.0	5.5	6.5	8.5	7.0	8.0	7.0	6.0	6.5
27	8.0	3.5	5.5	9.0	5.0	7.0	8.0	7.0	7.5	6.5	5.5	6.0
28	8.0	3.5	5.0	8.5	5.5	7.0	8.0	6.5	7.0	7.0	6.0	6.5
29	6.0	3.5	5.0	10.0	5.5	7.5	8.0	6.5	7.0	7.5	6.0	6.5
30	5.5	3.5	4.5	8.0	6.5	7.0	8.5	6.5	7.5	6.0	4.5	5.5
31	---	---	---	8.0	6.0	6.5	8.0	6.5	7.5	---	---	---
MONTH	8.5	2.5	4.8	10.0	3.5	6.0	11.0	5.5	7.7	9.5	4.5	6.7

15297610 RUSSELL CREEK NEAR COLD BAY

LOCATION.--Lat 55°10'40", long 162°41'15", (Cold Bay A-3 quad), Aleutians East Borough, Hydrologic Unit 19030101, on left bank, at Russell Creek Fish Hatchery, 2.1 mi upstream from mouth, and 2.6 mi southeast of Cold Bay. Prior to February 27, 1997, at site 0.2 mi downstream.

DRAINAGE AREA.--30.9 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1981 to December 1986, October 1995 to current year.

REVISED RECORDS.-- WRD AK-97-1: 1996, Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 7.65 ft above sea level. Prior to February 27, 1997, elevation 3.55 ft above sea level at site 0.2 mi downstream (levels by private engineering firm).

REMARKS.--Records good, except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e80	436	e190	238	e140	177	150	138	156	382	225	346
2	e75	303	844	237	e130	173	398	131	192	377	245	314
3	e70	260	537	201	e130	158	275	129	196	524	251	297
4	e70	374	353	191	e120	243	175	126	208	484	221	291
5	e80	266	309	e190	e130	249	224	125	221	632	210	217
6	e75	236	381	e180	e140	231	216	116	214	482	192	184
7	e70	258	555	e170	e150	193	188	112	207	371	187	160
8	e65	345	666	e170	e160	204	173	112	206	345	207	153
9	e60	462	1070	e170	e150	229	172	111	202	319	262	144
10	e75	349	568	e160	e160	259	155	108	211	426	235	149
11	e90	274	499	e160	e170	276	e150	108	207	401	206	231
12	e110	1050	696	e160	e170	205	e140	127	213	343	223	367
13	e120	706	536	e150	e180	191	e150	152	224	284	295	211
14	e110	488	493	e150	e190	210	156	139	226	414	342	181
15	e100	737	459	e150	197	186	191	138	245	818	388	216
16	e420	557	361	e150	332	163	174	145	250	525	263	204
17	278	619	303	e150	252	156	150	162	267	352	212	197
18	216	514	710	e150	189	145	138	162	281	667	204	165
19	183	391	584	e160	175	155	163	152	294	565	465	189
20	189	530	467	e160	178	136	246	153	345	406	337	480
21	251	413	366	e160	221	139	218	149	352	314	231	349
22	183	339	391	e150	227	125	189	142	617	264	278	283
23	167	316	356	e150	257	e120	196	136	1060	231	420	307
24	1230	292	355	e150	277	e120	179	128	555	219	402	473
25	463	269	312	e150	219	e120	166	129	385	216	306	329
26	376	250	280	e150	209	e110	167	132	327	220	276	311
27	325	232	312	e150	183	e110	164	120	338	325	252	247
28	277	216	361	e150	169	e110	158	121	384	385	215	209
29	276	202	321	e150	---	e100	156	136	463	340	206	204
30	243	195	267	e140	---	e110	149	145	382	289	228	218
31	235	---	243	e140	---	e130	---	152	---	250	284	---
TOTAL	6562	11879	14145	5087	5205	5233	5526	4136	9428	12170	8268	7626
MEAN	212	396	456	164	186	169	184	133	314	393	267	254
MAX	1230	1050	1070	238	332	276	398	162	1060	818	465	480
MIN	60	195	190	140	120	100	138	108	156	216	187	144
AC-FT	13020	23560	28060	10090	10320	10380	10960	8200	18700	24140	16400	15130
CFSM	6.85	12.8	14.8	5.31	6.02	5.46	5.96	4.32	10.2	12.7	8.63	8.23
IN.	7.90	14.30	17.03	6.12	6.27	6.30	6.65	4.98	11.35	14.65	9.95	9.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2001, BY WATER YEAR (WY)#

	MEAN	274	304	262	169	153	132	139	209	337	347	317	369
	MAX	516	530	549	318	272	218	261	300	634	528	403	538
	(WY)	1986	1986	1984	1982	1982	1996	1998	1982	2000	1982	2000	1998
	MIN	172	168	86.8	59.5	71.2	75.8	80.3	133	208	192	256	170
	(WY)	1997	2000	2000	2000	2000	1986	1985	2001	1997	1997	1996	2000

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1982 - 2001#
ANNUAL TOTAL	102190	95265	
ANNUAL MEAN	279	261	251
HIGHEST ANNUAL MEAN			302
LOWEST ANNUAL MEAN			206
HIGHEST DAILY MEAN	1570	Jun 2	4000
LOWEST DAILY MEAN	a55	Jan 6	b50
ANNUAL SEVEN-DAY MINIMUM	55	Jan 6	70
MAXIMUM PEAK FLOW		3060	c6000
MAXIMUM PEAK STAGE		28.74	d11.76
INSTANTANEOUS LOW FLOW			f49
ANNUAL RUNOFF (AC-FT)	202700	189000	181800
ANNUAL RUNOFF (CFSM)	9.04	8.45	8.12
ANNUAL RUNOFF (INCHES)	123.02	114.69	110.37
10 PERCENT EXCEEDS	560	464	444
50 PERCENT EXCEEDS	212	213	202
90 PERCENT EXCEEDS	65	128	92

See Period of Record
a Jan. 6-15
b Feb. 19-23, 1982
c From rating curve extended above 610 ft³/s on basis of estimate by slope-area measurement of 6,000 ft³/s and gage height of 11.19 ft
d Site and datum then in use; from flood marks
e Estimated
f Mar. 13-14, 1983

15297610 RUSSELL CREEK NEAR COLD BAY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1982-83, 1996 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: August 1996 to current year.

INSTRUMENTATION.--Electronic water-temperature recorder set for 1-hour recording interval.

REMARKS.--Records represent water-temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on August 28. No variation was found within the cross section. No variation was found between mean stream temperature and sensor temperature.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum, 15.5°C, August 13-14, 2001; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 15.5°C, August 13-14; minimum 0.0°C on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	STREAM WIDTH (FT) (000004)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (000009)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)
AUG							
28...	1132	75.0	3.00	25.95	210	6.0	11.5
28...	1133	75.0	19.0	25.95	210	6.0	11.5
28...	1134	75.0	39.0	25.95	210	6.0	11.5
28...	1135	75.0	59.0	25.95	210	6.0	11.5
28...	1136	75.0	74.0	25.95	210	6.0	11.5

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.0	6.0	7.0	4.5	2.5	4.0	.5	.0	.0	.5	.0	.0
2	9.5	6.0	7.0	4.0	1.5	2.5	2.0	.5	1.5	.5	.0	.0
3	8.5	5.0	7.0	5.0	3.0	4.0	1.5	1.0	1.5	1.0	.5	1.0
4	8.0	5.5	6.5	5.5	3.5	4.5	2.0	1.5	1.5	1.0	.0	.5
5	6.5	4.0	5.5	5.0	3.0	4.0	2.0	1.0	1.5	.0	.0	.0
6	4.0	1.0	2.5	4.0	3.5	3.5	3.0	1.0	2.0	.0	.0	.0
7	3.5	.5	1.5	5.5	2.5	4.0	3.5	1.0	2.5	.0	.0	.0
8	6.5	2.0	3.5	6.5	5.0	5.5	4.5	3.0	4.0	.0	.0	.0
9	4.5	2.0	3.5	6.0	5.0	5.5	4.0	2.0	3.0	.0	.0	.0
10	4.5	3.0	3.5	5.0	3.0	4.5	2.5	1.0	1.5	.0	.0	.0
11	6.5	2.5	4.0	4.0	2.0	3.0	3.0	1.5	2.5	.0	.0	.0
12	8.0	1.0	4.5	5.0	2.0	3.5	4.0	2.0	3.5	.0	.0	.0
13	7.0	4.5	5.5	4.0	2.0	3.0	2.0	1.0	1.5	.0	.0	.0
14	5.5	4.0	5.0	4.5	2.0	3.0	2.5	1.5	2.0	.0	.0	.0
15	4.5	3.5	4.0	4.5	3.0	4.0	2.0	1.0	1.5	.0	.0	.0
16	5.5	3.5	4.5	3.0	2.0	2.5	1.5	.5	1.0	.5	.0	.5
17	4.5	2.5	3.5	2.5	1.5	2.0	1.0	.0	.5	1.0	.5	1.0
18	6.0	2.0	3.5	2.5	1.0	1.5	2.0	.5	1.5	2.0	1.0	1.0
19	6.0	1.5	3.0	3.0	1.5	2.0	2.0	.5	1.5	1.5	.5	1.0
20	5.5	2.5	4.0	2.5	1.0	2.0	1.5	.5	1.0	2.0	.0	.5
21	4.5	2.5	4.0	3.0	2.0	2.5	2.0	1.0	1.5	.5	.0	.0
22	3.5	1.0	2.0	3.5	2.0	2.5	3.0	2.0	2.5	.5	.0	.0
23	5.5	1.5	3.0	3.0	2.5	2.5	3.0	2.5	2.5	.5	.0	.0
24	5.5	3.5	4.5	3.0	1.5	2.5	3.0	2.5	2.5	1.0	.0	.5
25	6.0	3.5	4.5	2.5	1.0	2.0	2.5	1.0	2.0	1.0	.5	.5
26	4.5	2.5	3.5	2.0	.5	1.0	3.0	1.5	2.0	1.5	.0	.5
27	5.0	3.0	4.0	1.5	.0	.5	3.0	1.5	2.0	.5	.0	.0
28	5.5	3.5	4.5	.0	.0	.0	3.0	2.5	2.5	1.5	.0	.5
29	4.5	3.0	4.0	1.0	.0	.5	2.5	2.0	2.5	.5	.0	.0
30	5.0	2.0	3.0	1.0	.0	.5	2.5	.5	1.5	.5	.0	.0
31	4.5	1.5	3.0	---	---	---	1.0	.0	.5	.5	.0	.0
MONTH	9.5	.5	4.2	6.5	.0	2.8	4.5	.0	1.9	2.0	.0	.2

15297610 RUSSELL CREEK NEAR COLD BAY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	.0	.0	.0	1.5	.0	.5	2.5	.0	.5	9.5	1.0	4.5
2	.0	.0	.0	1.0	.0	.5	2.0	.5	1.5	3.5	.5	1.5
3	.0	.0	.0	3.0	.0	1.0	4.0	.0	1.0	6.5	.5	3.0
4	.0	.0	.0	2.0	.0	.5	3.0	.0	1.0	8.0	1.0	3.5
5	1.0	.0	.5	4.0	.5	2.0	5.0	1.0	2.5	4.5	.0	2.0
6	1.5	.0	.5	4.0	1.0	2.0	6.0	.5	3.0	4.5	.5	2.0
7	2.0	.5	1.0	4.5	1.0	2.0	7.5	1.0	3.0	8.0	.5	3.5
8	2.0	.0	1.0	5.0	2.0	3.0	6.5	.5	3.0	7.0	2.0	4.5
9	1.0	.0	.5	3.5	1.5	2.5	6.0	1.5	3.5	7.5	2.0	4.5
10	2.0	.5	1.0	3.5	1.5	2.0	3.0	.0	.5	7.0	2.0	4.0
11	2.0	.0	1.0	2.5	1.5	2.0	.0	.0	.0	5.5	2.5	4.0
12	2.0	.0	.5	6.5	.5	2.5	.5	.0	.0	3.5	2.5	3.0
13	2.0	.0	1.0	3.0	1.0	2.0	1.5	.0	.5	9.0	2.5	4.5
14	3.0	1.0	1.5	3.5	2.0	2.5	1.5	.0	.5	11.5	1.5	6.0
15	3.5	1.0	2.0	2.0	.0	1.0	4.0	.5	1.5	10.0	3.5	6.5
16	2.0	.0	1.5	1.0	.0	.5	3.5	1.0	2.0	9.5	3.5	6.0
17	2.0	.5	1.0	.0	.0	.0	3.5	1.0	2.0	10.5	3.0	6.0
18	2.5	.0	1.0	4.0	.0	1.5	4.0	.5	2.0	11.0	2.5	6.0
19	2.0	.0	1.0	5.0	.0	1.5	4.5	.5	2.5	7.0	2.5	5.0
20	2.5	1.0	2.0	5.0	.0	1.5	5.0	2.0	3.5	6.5	3.5	5.0
21	2.5	1.5	2.0	3.5	.0	1.5	5.5	2.0	3.5	8.5	2.0	5.0
22	2.5	1.5	2.0	3.0	.0	1.5	7.5	2.5	4.5	7.5	2.0	4.5
23	4.0	2.0	2.5	.5	.0	.0	5.0	2.0	3.5	6.5	2.5	4.5
24	3.0	1.0	2.0	.0	.0	.0	4.5	.0	2.0	11.5	2.5	6.0
25	4.5	1.0	2.0	.0	.0	.0	6.5	1.5	3.5	8.0	1.5	5.0
26	3.5	1.0	2.0	.0	.0	.0	7.5	1.5	4.0	6.0	2.5	3.5
27	2.0	.0	1.0	.0	.0	.0	10.0	2.5	5.5	5.0	1.5	3.0
28	1.0	.0	.0	.0	.0	.0	5.5	2.5	4.0	5.0	2.5	3.5
29	---	---	---	.5	.0	.0	5.0	1.5	3.0	8.0	3.0	5.0
30	---	---	---	.5	.0	.0	6.5	.5	3.5	12.5	3.0	6.5
31	---	---	---	1.5	.0	.5	---	---	---	10.5	4.0	6.5
MONTH	4.5	.0	1.1	6.5	.0	1.1	10.0	.0	2.4	12.5	.0	4.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	9.0	4.0	6.0	9.0	5.0	6.5	12.0	6.0	8.0	9.5	5.5	7.0
2	10.5	4.5	7.0	11.5	5.0	7.5	9.0	7.0	8.0	9.5	5.5	7.0
3	13.0	4.0	7.5	8.0	5.0	6.5	9.5	5.5	7.0	11.5	5.0	7.5
4	13.0	4.0	7.5	13.0	4.0	7.0	9.0	5.5	7.0	10.5	6.5	8.0
5	9.0	3.5	5.5	8.0	4.5	6.0	13.0	6.0	8.5	12.0	4.5	7.5
6	9.5	3.5	6.0	6.5	4.0	5.0	10.0	6.0	8.0	10.0	4.5	6.5
7	12.0	4.5	7.0	12.5	3.5	7.0	14.5	6.0	9.0	11.0	4.0	6.5
8	8.5	4.0	6.0	10.0	4.5	6.5	10.5	7.0	8.5	12.0	5.5	7.5
9	11.5	4.0	7.5	8.0	4.5	6.0	13.0	7.5	9.5	8.5	4.0	6.5
10	13.5	4.5	7.5	8.0	5.0	6.5	13.5	6.0	9.0	11.5	6.0	8.0
11	12.5	3.5	7.0	9.0	5.0	6.5	12.0	5.0	8.5	8.5	6.0	7.0
12	10.5	4.0	6.5	6.5	5.0	5.5	15.0	6.5	10.0	10.0	5.5	7.5
13	9.0	4.0	6.0	9.0	5.0	6.5	15.5	7.5	10.5	9.0	7.0	7.5
14	10.0	4.0	6.5	11.0	6.5	8.0	15.5	6.5	10.0	7.5	4.5	6.0
15	9.5	4.0	6.5	8.5	5.5	7.5	11.5	8.0	9.5	7.0	6.0	6.5
16	14.5	2.5	8.0	9.5	4.0	6.5	10.5	6.5	8.5	8.5	6.5	7.5
17	13.5	4.5	8.0	10.0	5.0	7.0	10.5	6.5	8.5	10.0	5.5	7.5
18	12.0	4.5	8.0	9.0	7.0	8.0	10.0	6.5	8.0	9.5	3.5	6.0
19	12.0	4.0	7.5	9.0	6.0	7.0	11.0	7.0	9.0	8.5	6.0	7.0
20	10.0	4.5	6.5	8.0	5.0	6.5	10.0	6.0	7.5	7.5	6.0	7.0
21	12.5	4.0	7.0	7.0	4.5	6.0	12.5	5.0	8.0	9.5	4.5	6.5
22	6.5	5.0	5.5	9.0	5.0	6.5	11.0	6.0	8.5	9.0	5.5	7.0
23	8.0	4.5	6.0	10.0	6.0	7.5	8.0	6.0	7.0	7.5	5.0	6.0
24	7.0	4.0	5.0	9.5	6.0	7.5	7.0	6.0	6.5	6.5	4.0	5.5
25	11.5	4.0	7.0	9.5	6.0	7.5	8.5	5.0	6.5	5.5	4.0	4.5
26	12.5	4.5	7.5	10.5	5.5	8.0	9.5	5.5	7.0	7.0	4.5	5.5
27	12.5	4.5	8.0	10.5	7.0	8.5	13.5	6.5	9.0	7.0	4.0	5.0
28	11.5	3.5	7.5	12.5	7.0	9.0	8.5	5.5	7.0	7.5	3.0	5.0
29	8.5	5.5	6.5	10.5	6.5	8.0	10.0	6.5	8.0	8.0	4.5	5.5
30	8.5	4.0	6.0	8.5	5.5	7.0	8.0	5.5	6.5	7.0	3.5	5.0
31	---	---	---	11.0	5.5	7.5	9.5	6.5	7.5	---	---	---
MONTH	14.5	2.5	6.8	13.0	3.5	7.0	15.5	5.0	8.2	12.0	3.0	6.6

15300300 ILIAMNA RIVER NEAR PEDRO BAY

LOCATION.--Lat 59°45'31", long 153°50'41", in NE¹/₄ SE¹/₄ sec. 10, T. 5 S., R. 27 W.(Iliamna D-3 quad), Lake and Peninsula Borough, Hydrologic Unit 19030206, on left bank 100 ft downstream from bridge on road between Pile Bay and Williamsport, 9.2 mi east of Pedro Bay, and 37 mi east of Iliamna.

DRAINAGE AREA.--128 mi².

PERIOD OF RECORD.--May 1996 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 80 ft above sea level, from topographic map.

REMARKS.--Records are good except for estimated daily discharges which are poor. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	453	e400	e400	e320	e340	e210	e160	e220	1980	2870	1770	1290
2	425	376	e400	e300	e320	e200	e160	e220	2070	2660	1700	1060
3	408	355	e400	e270	e320	e200	e160	e230	2540	3000	1520	949
4	444	338	e380	e250	e300	e200	e160	e230	2480	3100	1390	1120
5	690	328	e380	e240	e290	e200	e160	e240	2410	2620	1220	2010
6	894	317	382	e250	e290	e190	e160	e240	2070	2700	1260	2730
7	1280	302	441	e280	e280	e190	e160	e250	1980	2780	1350	1790
8	910	292	384	e280	e270	e190	e160	e260	2000	2460	1360	1240
9	721	360	359	e250	e260	e190	e160	e280	2170	2350	1380	992
10	635	838	352	e230	e250	e190	e160	290	2450	2530	1270	850
11	565	867	354	e240	e240	e190	e160	306	2700	3300	1350	772
12	511	701	511	e250	e240	e180	e150	332	2700	3640	1620	733
13	499	850	494	e280	e230	e180	e150	387	2580	2600	1580	801
14	903	823	451	e320	e230	e180	e150	462	2570	2140	1580	791
15	846	669	419	e400	e230	e180	e150	556	2860	2810	1530	884
16	771	669	388	e440	e230	e180	e150	721	3040	3280	1650	867
17	690	806	e420	e500	e240	e180	e160	765	3330	2900	1490	848
18	680	857	e440	e600	e250	e180	e160	859	3470	2630	1750	838
19	615	869	e460	e650	e250	e170	e170	959	3200	7460	1710	848
20	557	901	e440	e650	e240	e170	e170	1070	3210	6990	3510	801
21	512	1150	e420	e625	e240	e170	e180	1160	3740	3900	1850	1410
22	477	1370	e380	e600	e230	e170	e180	1160	4060	2790	1550	1110
23	426	1030	e400	e600	e230	e170	e190	1240	4250	2540	1170	1340
24	457	815	e420	521	e220	e170	e190	1170	4070	2410	1180	2090
25	983	669	e420	477	e220	e170	e200	1200	3820	2110	1690	1250
26	732	571	e440	546	e220	e160	e200	1310	4280	1940	1210	1050
27	624	502	e440	502	e210	e160	e210	1170	4300	2150	1060	987
28	548	518	e420	430	e210	e160	e210	1210	4500	1930	1260	872
29	498	470	e420	393	---	e160	e220	1470	3820	1870	1870	782
30	464	420	e400	365	---	e160	e220	1610	3520	2210	2240	694
31	419	---	e360	342	---	e160	---	1750	---	2190	1800	---
TOTAL	19637	19433	12775	12401	7080	5560	5170	23327	92170	90860	48870	33799
MEAN	633	648	412	400	253	179	172	752	3072	2931	1576	1127
MAX	1280	1370	511	650	340	210	220	1750	4500	7460	3510	2730
MIN	408	292	352	230	210	160	150	220	1980	1870	1060	694
AC-FT	38950	38550	25340	24600	14040	11030	10250	46270	182800	180200	96930	67040
CFSM	4.95	5.06	3.22	3.13	1.98	1.40	1.35	5.88	24.0	22.9	12.3	8.80
IN.	5.71	5.65	3.71	3.60	2.06	1.62	1.50	6.78	26.79	26.41	14.20	9.82

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)#

	MEAN	588	427	208	168	128	175	278	986	2557	1741	1240	1454
	MAX	861	748	412	400	253	407	500	1313	3790	2931	1631	2178
	(WY)	2000	1999	2001	2001	2001	1998	1998	1998	1998	2001	1999	1999
	MIN	289	161	84.5	75.2	61.6	60.6	87.8	752	1716	788	692	627
	(WY)	1997	1997	1997	1998	1998	1999	1999	2001	1996	1997	1997	1996

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1996 - 2001#
ANNUAL TOTAL	291542	371082	
ANNUAL MEAN	797	1017	874
HIGHEST ANNUAL MEAN			1083
LOWEST ANNUAL MEAN			622
HIGHEST DAILY MEAN	7830	7460	12300
LOWEST DAILY MEAN	a140	b150	c38
ANNUAL SEVEN-DAY MINIMUM	140	153	40
MAXIMUM PEAK FLOW		11400	14800
MAXIMUM PEAK STAGE		69.44	71.82
ANNUAL RUNOFF (AC-FT)	578300	736000	633500
ANNUAL RUNOFF (CFSM)	6.22	7.94	6.83
ANNUAL RUNOFF (INCHES)	84.73	107.85	92.82
10 PERCENT EXCEEDS	1940	2620	2190
50 PERCENT EXCEEDS	488	518	503
90 PERCENT EXCEEDS	150	180	85

See Period of Record; partial year used in monthly statistics
a From Mar. 8-27
b From Apr. 12-16
c From Jan. 5-6, 1997
e Estimated

15303700 TATALINA RIVER NEAR TAKOTNA

LOCATION.--Lat 62°53'06", long 155°56'22", in NW¹/₄ NE¹/₄ sec. 12, T.32 N., R.36 W.(McGrath D-6 quad), Hydrologic Unit 19030405, at downstream side of bridge on right bank, 1.2 mi southeast of Tatalina Airstrip, and 8.1 mi southeast of Takotna.

DRAINAGE AREA.--76.9 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1987 to current year (no winter record), except May only in 1989, and annual maximum in water year 1991.

GAGE.--Water-stage recorder, non-recording gage, and crest-stage gage. Elevation of gage is 450 ft above sea level, from topographic map. Prior to May 9, 1990 at site 20 ft downstream at same datum.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. Precipitation gage and air temperature recorder at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,170 ft³/s, July 8, 1998, gage-height 10.97 ft; maximum gage height 11.46 ft, 1996, date and time unknown, backwater from ice, discharge not determined; minimum discharge not determined, occurs during winter.

EXTREMES FOR CURRENT PERIOD.-- October 2000 and May to September 2001: maximum discharge during period, 686 ft³/s, August 20, gage height 8.41 ft; maximum observed gage height 10.95 ft, May 13, backwater from ice, discharge not determined; minimum discharge not determined, occurs during winter.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	121	---	---	---	---	---	---	e100	413	67	180	123
2	e120	---	---	---	---	---	---	e110	368	66	138	115
3	e110	---	---	---	---	---	---	e120	332	68	123	110
4	e110	---	---	---	---	---	---	e130	296	79	112	125
5	e100	---	---	---	---	---	---	e140	263	70	106	168
6	e100	---	---	---	---	---	---	e150	238	67	99	133
7	e95	---	---	---	---	---	---	e160	220	63	94	117
8	e90	---	---	---	---	---	---	e170	244	62	89	108
9	e85	---	---	---	---	---	---	e180	227	61	83	102
10	e80	---	---	---	---	---	---	e190	196	64	79	97
11	e75	---	---	---	---	---	---	e210	180	128	80	92
12	e70	---	---	---	---	---	---	e250	164	172	82	89
13	e65	---	---	---	---	---	---	e280	153	130	78	84
14	e60	---	---	---	---	---	---	e320	143	114	98	79
15	e55	---	---	---	---	---	---	e350	129	100	126	77
16	e50	---	---	---	---	---	---	e380	121	109	387	73
17	e48	---	---	---	---	---	---	e410	117	127	221	71
18	e46	---	---	---	---	---	---	e440	111	112	240	70
19	e44	---	---	---	---	---	---	e470	104	118	296	69
20	e42	---	---	---	---	---	---	e500	99	174	582	68
21	e40	---	---	---	---	---	---	e530	94	180	343	67
22	e38	---	---	---	---	---	---	e545	90	154	271	65
23	e36	---	---	---	---	---	---	e530	87	182	243	65
24	e34	---	---	---	---	---	---	494	88	144	226	64
25	e32	---	---	---	---	---	---	492	88	123	203	62
26	e30	---	---	---	---	---	---	520	81	117	184	61
27	e28	---	---	---	---	---	---	468	77	156	169	64
28	e26	---	---	---	---	---	---	526	75	130	157	64
29	e24	---	---	---	---	---	---	559	72	115	146	60
30	e22	---	---	---	---	---	---	522	69	132	137	59
31	e20	---	---	---	---	---	---	470	---	230	130	---
TOTAL	1896	---	---	---	---	---	---	10716	4939	3614	5502	2601
MEAN	61.2	---	---	---	---	---	---	346	165	117	177	86.7
MAX	121	---	---	---	---	---	---	559	413	230	582	168
MIN	20	---	---	---	---	---	---	100	69	61	78	59
AC-FT	3760	---	---	---	---	---	---	21260	9800	7170	10910	5160
CFSM	.80	---	---	---	---	---	---	4.50	2.14	1.52	2.31	1.13
IN.	.92	---	---	---	---	---	---	5.18	2.39	1.75	2.66	1.26

e Estimated

15303700 TATALINA RIVER NEAR TAKOTNA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- Water years 1992 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: July 1992 to current year (seasonal).

INSTRUMENTATION.--Electronic water-temperature recorder set for 1-hour recording interval.

REMARKS.--Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross sections on July 19 and September 6. No variation was found between mean stream temperature and sensor temperature.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE.--Maximum recorded, 16.5°C, July 30 to August 2, and 4, 1997; minimum, 0.0°C, several days in October, May, and September most water years.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 11.5° C, June 23, 29-30 and July 2; minimum, 0.0° C, several days in October and May.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	STREAM WIDTH (FT) (000004)	SAMPLE	DIS-	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	SAM- PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)
			LOC-	CHARGE,				
			ATION,	INST.				
			CROSS	CUBIC				
			SECTION (FT FM R BK) (72103)	GAGE HEIGHT (FEET) (00065)	FEET PER SECOND (00061)			
JUL								
19...	1616	33.0	4.0	4.44	121	8.5	17.0	8010
19...	1618	33.0	12.0	4.44	121	8.5	17.0	8010
19...	1620	33.0	20.0	4.44	121	8.5	17.0	8010
19...	1622	33.0	28.0	4.44	121	8.5	17.0	8010
19...	1624	33.0	33.0	4.44	121	8.5	17.0	8010
SEP								
06...	1532	34.0	8.0	4.53	130	5.5	7.5	8010
06...	1534	34.0	16.0	4.53	130	5.5	7.5	8010
06...	1536	34.0	24.0	4.53	130	5.5	7.5	8010
06...	1538	34.0	32.0	4.53	130	5.5	7.5	8010
06...	1540	34.0	34.0	4.53	130	5.5	7.5	8010

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

[illegible]

15303700 TATALINA RIVER NEAR TAKOTNA--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	.0	---
20	---	---	---	---	---	---	---	---	---	.5	.0	.0
21	---	---	---	---	---	---	---	---	---	1.0	.0	.5
22	---	---	---	---	---	---	---	---	---	1.0	.0	.5
23	---	---	---	---	---	---	---	---	---	1.0	.0	.5
24	---	---	---	---	---	---	---	---	---	1.5	.0	.5
25	---	---	---	---	---	---	---	---	---	1.0	.5	.5
26	---	---	---	---	---	---	---	---	---	1.5	.0	.5
27	---	---	---	---	---	---	---	---	---	2.5	.5	1.5
28	---	---	---	---	---	---	---	---	---	3.5	1.0	2.5
29	---	---	---	---	---	---	---	---	---	4.0	2.0	3.0
30	---	---	---	---	---	---	---	---	---	4.0	2.5	3.0
31	---	---	---	---	---	---	---	---	---	4.0	3.0	3.5
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	4.5	3.0	3.5	11.0	9.0	10.0	9.0	7.0	8.0	5.5	5.0	5.0
2	5.0	3.5	4.0	11.5	9.0	10.0	8.5	7.0	7.5	6.0	5.0	5.5
3	5.0	4.5	5.0	10.5	9.0	9.5	8.0	7.0	7.5	6.0	5.5	6.0
4	5.5	4.5	5.0	9.0	8.0	8.5	7.0	6.0	6.5	6.0	5.5	5.5
5	5.5	4.0	4.5	8.5	8.0	8.0	7.0	5.0	6.0	6.0	5.5	5.5
6	6.5	5.0	5.5	8.5	7.5	8.0	8.5	6.0	7.0	6.0	5.0	5.5
7	6.5	4.5	5.5	9.5	7.5	8.5	8.5	6.5	7.5	5.0	4.0	4.5
8	4.5	4.0	4.0	10.5	7.5	9.0	9.0	7.5	8.5	4.5	4.0	4.0
9	5.5	3.5	4.5	9.0	7.5	8.5	9.5	8.0	9.0	4.5	3.5	4.0
10	6.0	4.5	5.0	9.0	8.0	8.5	9.0	8.0	8.0	4.0	3.0	3.5
11	6.0	4.5	5.5	8.5	7.0	7.5	8.0	7.5	7.5	4.0	3.0	3.5
12	6.5	5.0	6.0	7.5	6.5	7.0	8.5	7.5	8.0	4.0	2.5	3.0
13	6.5	5.0	5.5	8.0	7.0	7.5	10.0	8.0	9.0	4.0	2.5	3.0
14	5.0	4.5	4.5	8.5	7.5	8.0	10.0	9.0	9.5	4.5	3.0	3.5
15	6.5	3.5	5.0	8.5	7.5	8.0	9.0	9.0	9.0	5.5	4.0	4.5
16	8.5	5.5	7.0	8.0	7.5	8.0	9.0	8.0	8.5	4.5	3.5	4.0
17	9.0	7.0	8.0	8.0	7.0	7.5	8.5	7.5	8.0	4.0	3.0	3.5
18	9.0	7.0	8.0	8.0	6.5	7.5	7.5	7.0	7.5	5.0	3.5	4.0
19	9.0	8.0	8.5	8.5	7.5	8.0	7.5	7.0	7.0	5.5	4.5	5.0
20	9.5	8.0	9.0	8.0	7.5	8.0	7.5	6.5	7.0	5.5	4.5	5.0
21	10.0	8.0	9.0	9.0	7.5	8.0	7.5	7.0	7.5	5.0	3.5	4.5
22	11.0	8.5	9.5	8.5	8.0	8.5	7.0	5.5	6.0	4.0	2.5	3.0
23	11.5	9.0	10.0	9.0	8.0	8.5	5.5	5.0	5.5	3.0	1.5	2.5
24	10.5	9.5	10.0	10.0	8.5	9.0	6.0	5.5	5.5	3.0	1.5	2.0
25	10.5	8.5	9.5	9.5	8.5	9.0	5.5	5.0	5.5	2.5	1.0	2.0
26	10.5	8.5	9.5	9.0	8.0	8.5	6.0	4.5	5.5	3.0	2.0	2.5
27	9.5	8.5	9.0	9.0	7.0	8.0	6.0	5.0	5.5	3.5	2.5	2.5
28	10.5	7.5	8.5	9.0	8.0	8.5	5.5	5.0	5.5	2.5	1.5	2.0
29	11.5	8.0	9.5	9.0	8.0	8.5	5.5	5.0	5.5	1.5	.5	1.0
30	11.5	9.0	10.5	8.5	8.0	8.0	5.5	4.5	5.0	1.5	1.0	1.0
31	---	---	---	8.0	7.5	8.0	5.5	5.0	5.0	---	---	---
MONTH	11.5	3.0	6.9	11.5	6.5	8.3	10.0	4.5	7.0	6.0	.5	3.7

15303900 KUSKOKWIM RIVER AT LISKYS CROSSING NEAR STONY RIVER

LOCATION.--Lat 62°02'51", long 156°12'42", in NE¹/₄ SE¹/₄ sec. 27, T. 23 N., R. 38 W. (Iditarod A-1 quad), Hydrologic Unit 19030405, on the downstream point of the first channel island located 0.25 mi above Lisky's house site (historic, house since destroyed), 22 mi northeast of the village of Stony River.

PERIOD OF RECORD.--May 1996 to current year (no winter record).

GAGE.--Water-stage recorder. Elevation of gage is 250 ft above sea level from topographic map.

REMARKS.-- GOES satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height observed 33.80 ft, July 11, 1998, but may have been higher during a period of missing record. Minimum gage height observed 22.94 ft, October 11, 1997, but may have been lower during a period of missing record.

EXTREMES FOR CURRENT PERIOD.--October 1-13, 2000, June 7 to September 30 2001; Maximum gage height 32.89 ft, August 21; minimum gage height 24.95 ft, September 22.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29.37	---	---	---	---	---	---	---	---	28.15	30.77	28.96
2	28.75	---	---	---	---	---	---	---	---	28.14	30.65	28.61
3	28.18	---	---	---	---	---	---	---	---	28.05	30.99	28.33
4	27.70	---	---	---	---	---	---	---	---	28.17	31.22	28.10
5	27.25	---	---	---	---	---	---	---	---	28.02	31.01	27.87
6	26.98	---	---	---	---	---	---	---	---	27.87	30.64	27.63
7	26.65	---	---	---	---	---	---	---	29.02	27.96	30.19	27.55
8	26.47	---	---	---	---	---	---	---	29.09	27.92	29.73	27.73
9	26.31	---	---	---	---	---	---	---	29.06	27.89	29.12	27.88
10	26.09	---	---	---	---	---	---	---	29.05	27.98	28.67	27.73
11	25.81	---	---	---	---	---	---	---	29.15	27.88	28.39	27.37
12	25.55	---	---	---	---	---	---	---	29.03	27.68	28.23	27.03
13	25.47	---	---	---	---	---	---	---	28.65	27.46	28.06	26.85
14	---	---	---	---	---	---	---	---	28.45	27.48	27.95	26.57
15	---	---	---	---	---	---	---	---	28.32	27.69	27.80	26.34
16	---	---	---	---	---	---	---	---	28.21	27.85	27.99	26.10
17	---	---	---	---	---	---	---	---	28.14	27.81	28.23	26.00
18	---	---	---	---	---	---	---	---	28.08	27.68	29.12	25.84
19	---	---	---	---	---	---	---	---	27.83	27.67	30.83	25.61
20	---	---	---	---	---	---	---	---	27.89	27.83	32.32	25.46
21	---	---	---	---	---	---	---	---	27.83	28.03	32.79	25.33
22	---	---	---	---	---	---	---	---	28.08	28.37	32.83	25.26
23	---	---	---	---	---	---	---	---	28.31	28.89	32.59	25.37
24	---	---	---	---	---	---	---	---	28.36	29.51	32.27	25.43
25	---	---	---	---	---	---	---	---	28.38	29.76	32.01	25.44
26	---	---	---	---	---	---	---	---	28.38	29.92	31.64	25.62
27	---	---	---	---	---	---	---	---	28.45	30.08	31.21	25.65
28	---	---	---	---	---	---	---	---	28.55	30.12	30.90	25.52
29	---	---	---	---	---	---	---	---	28.55	30.23	30.47	25.43
30	---	---	---	---	---	---	---	---	28.35	30.62	29.89	25.35
31	---	---	---	---	---	---	---	---	---	30.93	29.38	---
MEAN	---	---	---	---	---	---	---	---	---	28.50	30.25	26.60
MAX	---	---	---	---	---	---	---	---	---	30.93	32.83	28.96
MIN	---	---	---	---	---	---	---	---	---	27.46	27.80	25.26

15304000 KUSKOKWIM RIVER AT CROOKED CREEK

LOCATION.--Lat 61°52'16", long 158°06'03", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 32, T. 21 N., R. 48 W. (Sleetmute D-6 quad), Hydrologic Unit 19030501, on right bank at village of Crooked Creek, 0.1 mi upstream from Crooked Creek.

DRAINAGE AREA.--31,100 mi², approximately.

PERIOD OF RECORD.--June 1951 to September 1994, October 1995 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 200 ft above sea level, from topographic map. Prior to August 6, 1977, non-recording gage at site 1,600 ft upstream at same datum. From August 6, 1977, to September 30, 1991, water-stage recorder at site 2,300 ft upstream at same datum. From October 1, 1991 to September 30, 1994, and October 1, 1995 to August 7, 1997 non-recording gage.

REMARKS.--Records good except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76300	e29000	e22000	e16000	e12000	e11000	e9000	e30000	116000	75400	96700	81200
2	71300	e28000	e21000	e16000	e12000	e11000	e9000	e30000	113000	73300	97500	78100
3	67300	e28000	e21000	e16000	e12000	e11000	e9000	e28000	113000	71300	94000	74600
4	63800	e27000	e21000	e16000	e12000	e11000	e9000	e27000	113000	69500	91800	72200
5	60700	e27000	e21000	e16000	e12000	e11000	e9000	e27000	112000	68600	89800	71400
6	58700	e26000	e20000	e15000	e12000	e10000	e9500	e27000	114000	68100	85300	71800
7	57200	e26000	e20000	e15000	e12000	e10000	e9500	e27000	115000	68000	80700	74200
8	55200	e25000	e20000	e15000	e12000	e10000	e9500	e28000	117000	66600	76300	75500
9	52900	e25000	e20000	e15000	e12000	e10000	e9500	e30000	119000	64200	71700	73700
10	50600	e25000	e19000	e15000	e12000	e10000	e9500	e36000	118000	61900	68100	71600
11	48800	e26000	e19000	e15000	e12000	e10000	e9500	e42000	117000	61200	65300	69000
12	47600	e27000	e20000	e15000	e12000	e10000	e9500	e55000	116000	61700	62900	65700
13	46100	e27000	e20000	e15000	e12000	e10000	e10000	e60000	115000	63100	61000	62900
14	44400	e27000	e20000	e15000	e12000	e10000	e10000	e70000	112000	64200	60500	60400
15	41500	e27000	e20000	e14000	e12000	e10000	e10000	e75000	108000	64700	60200	58300
16	40900	e27000	e19000	e14000	e11000	e10000	e10000	e80000	104000	64900	62600	56000
17	40400	e27000	e19000	e14000	e11000	e10000	e11000	e90000	99100	65500	70600	54200
18	38800	e27000	e19000	e14000	e11000	e10000	e11000	e100000	94000	67000	82500	52700
19	39100	e26000	e20000	e14000	e11000	e10000	e11000	e110000	89000	69400	90500	51000
20	37500	e26000	e19000	e14000	e11000	e10000	e12000	118000	86300	70500	104000	49900
21	36300	e25000	e18000	e14000	e11000	e9500	e13000	122000	85700	72000	116000	48400
22	e36000	e25000	e18000	e14000	e11000	e9500	e14000	124000	85700	76100	122000	47300
23	e34000	e24000	e18000	e14000	e11000	e9500	e16000	123000	85800	79500	120000	46500
24	e34000	e24000	e18000	e13000	e11000	e9500	e17000	122000	86300	82600	114000	45600
25	e32000	e24000	e17000	e13000	e11000	e9500	e18000	121000	86300	87700	107000	44600
26	e32000	e23000	e17000	e13000	e11000	e9500	e20000	121000	85400	90900	103000	43600
27	e32000	e23000	e17000	e13000	e11000	e9500	e21000	119000	83300	92900	101000	42800
28	e30000	e23000	e17000	e13000	e11000	e9500	e23000	119000	81000	95200	96000	42500
29	e30000	e22000	e17000	e13000	---	e9500	e26000	120000	79300	95300	91900	42400
30	e30000	e22000	e17000	e13000	---	e9500	e28000	120000	77300	92500	86900	41000
31	e29000	---	e16000	e13000	---	e9500	---	119000	---	92400	83000	---
TOTAL	1394400	768000	590000	445000	323000	309500	392500	2420000	3026500	2296200	2712800	1769100
MEAN	44980	25600	19030	14350	11540	9984	13080	78060	100900	74070	87510	58970
MAX	76300	29000	22000	16000	12000	11000	28000	124000	119000	95300	122000	81200
MIN	29000	22000	16000	13000	11000	9500	9000	27000	77300	61200	60200	41000
AC-FT	2766000	1523000	1170000	882700	640700	613900	778500	4800000	6003000	4555000	5381000	3509000
CFSM	1.45	.82	.61	.46	.37	.32	.42	2.51	3.24	2.38	2.81	1.90
IN.	1.67	.92	.71	.53	.39	.37	.47	2.89	3.62	2.75	3.24	2.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2001, BY WATER YEAR (WY)#

	MEAN	44350	21300	15290	13020	11640	10720	14500	79880	82860	68170	76270	69430
MAX	102000	36400	25000	22450	20710	19550	41000	161700	235100	119500	169800	150900	
(WY)	1994	1991	1962	1991	1991	1991	1967	1957	1964	1980	1963	1951	
MIN	22650	12730	10000	8400	6900	6100	8600	22130	33880	40910	41840	30550	
(WY)	1979	1981	1957	1966	1966	1966	1953	1964	1954	1997	1957	1976	

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1951 - 2001#
ANNUAL TOTAL	14941200	16447000	
ANNUAL MEAN	40820	45060	42290
HIGHEST ANNUAL MEAN			62120
LOWEST ANNUAL MEAN			28600
HIGHEST DAILY MEAN	110000	May 3	391000
LOWEST DAILY MEAN	a9600	Mar 16	c6100
ANNUAL SEVEN-DAY MINIMUM	9600	Mar 16	6100
MAXIMUM PEAK FLOW		125000	392000
MAXIMUM PEAK STAGE		11.49	
MAXIMUM PEAK STAGE		d12.70	f25.74
INSTANTANEOUS LOW FLOW			6100
ANNUAL RUNOFF (AC-FT)	29640000	32620000	30640000
ANNUAL RUNOFF (CFSM)	1.31	1.45	1.36
ANNUAL RUNOFF (INCHES)	17.87	19.67	18.48
10 PERCENT EXCEEDS	78500	102000	94000
50 PERCENT EXCEEDS	32000	28000	26000
90 PERCENT EXCEEDS	9800	10000	10000

- # See Period of Record, partial years used in monthly computations
 c Mar. 1-31, 1966
 a Mar. 16 to Mar. 31
 d From floodmarks, backwater from ice
 b Apr. 1 to Apr. 5
 e Estimated
 f From floodmarks, backwater from ice, at different site, same datum

LOCATION.--Lat 61°35'14", long 159°32'54", in SE¹/₄ SE¹/₄ sec. 2, T. 17 N., R. 57 W. (Russian Mission C-2 quad), Hydrologic unit 19030502, on the left bank near the NW corner of the west end of the runway in the village of Aniak.

PERIOD OF RECORD.--May 1996 to present (no winter record).

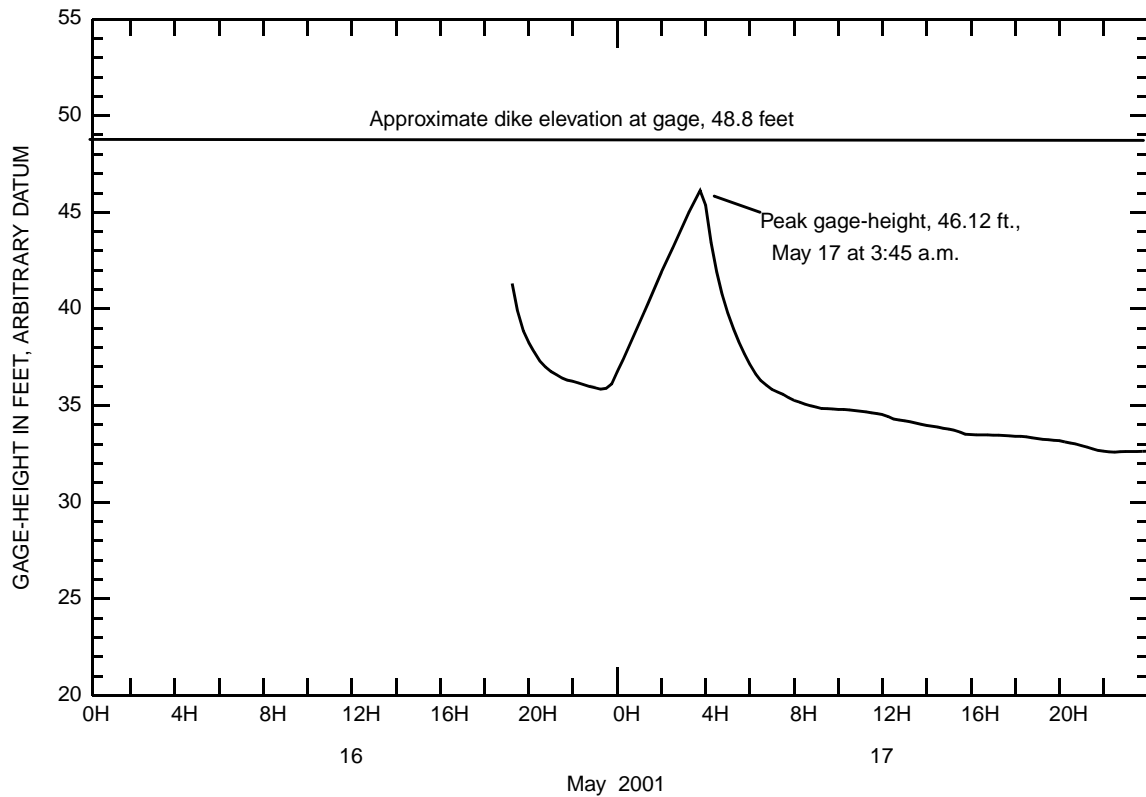
GAGE.--Water-stage recorder. A supplementary stage gage was installed April 23, 1998 approximately 1 mi upstream from gage of record. This gage records water elevation at the Aniak city dike system during ice break-up events. Elevation of the gage is 75 ft above sea level from topographic map.

EXTREMES FOR PERIOD OF RECORD. Maximum gage height observed 26.55 ft, July 12, 1998, but may have been higher during periods of missing record. Minimum gage height observed 15.33 ft, October 12, 1997, but may have been lower during periods of missing record.

EXTREMES FOR CURRENT PERIOD.-October 1-29, 2000 and June 5 to September 30, 2001: Maximum gage height observed 24.11 ft, June 9, but may have been higher during periods of missing record. Minimum gage height observed 14.37 ft, Oct. 27, but may have been lower during periods of missing record.

[illegible]

15304060 KUSKOKWIM RIVER AT ANIAK--Continued



River ice break-up hydrograph for Kuskokwim River at Dike (supplementary gage) at Aniak, 2001.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1998 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: May 1998 to current year (seasonal).

INSTRUMENTATION.--Electronic water temperature recorder set for 1-hour recording interval.

REMARKS.--Records represent water temperature from sensor within 0.5°C. No water temperature record October 31-May 15 and July 8-9 when water level dropped below probe. No water temperature record from May 16-June 4 with probe broken by shifting ice. Partial water temperature record on Oct. 30, July 8, 10, 16-17, and August 3. A temperature cross section on September 20 found a variation of 1.0°C. Temperature from the sensor could not be compared with the cross section average for the river on September 20 because of a faulty sensor probe. The sensor probe gave faulty temperature record from August 4-September 30 and was not used.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum recorded, 15.5°C, July 22-24, 1998, may have been higher during periods of missing record; minimum, 0.0°C, May 14-15, 1999.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 14.5°C, July 28-29, August 1-2, may have been higher during periods of missing record; minimum recorded, 1.5°C, October 30, may have been lower during periods of missing record.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	STREAM WIDTH (FT) (00004)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	GAGE HEIGHT (FEET) (00065)	TEMPER- ATURE WATER (DEG C) (00010)	SAM- PLING METHOD, CODES (82398)
SEP						
20...	1240	1600	10.0	17.38	7.5	10
20...	1242	1600	300	17.38	8.5	10
20...	1244	1600	600	17.38	8.5	10
20...	1246	1600	900	17.38	8.5	10
20...	1248	1600	1200	17.38	8.5	10

15304060 KUSKOKWIM RIVER AT ANIAK --Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

[illegible]

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

[illegible]

15320100 WADE CREEK TRIBUTARY NEAR CHICKEN

LOCATION.-- Lat 64°07'06", long 141°33'13", in SE¹/₄ sec. 18, T. 27 N., R. 20 E. (Eagle A-2 quad), Hydrologic Unit 19040104, on left bank, 600 ft upstream from Taylor Highway, 0.4 mi upstream from the culvert at mi 86.1 Taylor Highway and 12 mi northeast of Chicken.

DRAINAGE AREA.--4.24 mi².

PERIOD OF RECORD.--Annual maximum, water year 1995. May 1996 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 1970 ft above sea level, from topographic map. Prior to June 19, 1997, recording gage was at a site 700 ft downstream at a different datum.

REMARKS.--No estimated daily discharges. Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 236 ft³/s, June 13, 1997, from rating curve extended above 14 ft³/s on basis of slope-area measurement of peak flow, gage height, 22.7 ft, from floodmarks; no flow most days during the winter.

EXTREMES FOR CURRENT PERIOD.--Maximum discharge, 127 ft³/s, July 24, gage height, 22.04 ft, no flow most days during the winter.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	16	.47	15	1.4
2	---	---	---	---	---	---	---	---	9.5	.64	9.7	2.9
3	---	---	---	---	---	---	---	---	6.8	.79	7.1	5.2
4	---	---	---	---	---	---	---	---	6.5	2.9	7.0	5.2
5	---	---	---	---	---	---	---	---	6.6	4.1	5.5	4.5
6	---	---	---	---	---	---	---	---	4.8	6.2	4.6	13
7	---	---	---	---	---	---	---	---	4.5	16	3.5	6.6
8	---	---	---	---	---	---	---	---	5.5	8.7	2.4	3.5
9	---	---	---	---	---	---	---	---	4.3	5.1	2.1	2.4
10	---	---	---	---	---	---	---	---	3.3	3.9	1.8	1.6
11	---	---	---	---	---	---	---	---	2.6	3.8	1.6	1.2
12	---	---	---	---	---	---	---	---	2.6	3.1	2.0	.88
13	---	---	---	---	---	---	---	---	24	2.2	2.0	.68
14	---	---	---	---	---	---	---	---	19	1.8	1.6	.52
15	---	---	---	---	---	---	---	---	10	1.7	1.4	.45
16	---	---	---	---	---	---	---	---	5.8	1.6	1.3	.70
17	---	---	---	---	---	---	---	---	3.8	1.3	1.7	1.4
18	---	---	---	---	---	---	---	---	2.8	1.2	1.7	1.8
19	---	---	---	---	---	---	---	---	2.2	1.1	1.9	2.0
20	---	---	---	---	---	---	---	---	1.8	.91	1.8	2.0
21	---	---	---	---	---	---	---	---	1.8	.94	1.5	2.0
22	---	---	---	---	---	---	---	24	1.5	2.6	1.4	---
23	---	---	---	---	---	---	---	26	1.3	26	1.4	---
24	---	---	---	---	---	---	---	31	1.1	59	1.3	---
25	---	---	---	---	---	---	---	27	1.0	20	1.3	---
26	---	---	---	---	---	---	---	25	.80	16	1.5	---
27	---	---	---	---	---	---	---	25	.44	14	1.6	---
28	---	---	---	---	---	---	---	23	.42	10	1.8	---
29	---	---	---	---	---	---	---	14	.45	8.4	1.5	---
30	---	---	---	---	---	---	---	12	.42	11	2.0	---
31	---	---	---	---	---	---	---	20	---	17	1.6	---
TOTAL	---	---	---	---	---	---	---	---	151.63	252.45	92.6	---
MEAN	---	---	---	---	---	---	---	---	5.05	8.14	2.99	---
MAX	---	---	---	---	---	---	---	---	24	59	15	---
MIN	---	---	---	---	---	---	---	---	.42	.47	1.3	---
AC-FT	---	---	---	---	---	---	---	---	301	501	184	---
CFSM	---	---	---	---	---	---	---	---	1.19	1.92	.70	---
IN.	---	---	---	---	---	---	---	---	1.33	2.21	.81	---

15356000 YUKON RIVER AT EAGLE
(International Gaging Station)

LOCATION.--Lat 64°47'22", long 141°11'52", in NW¹/₄ sec. 31, T. 1 S., R. 33 E. (Eagle D-1 quad), Hydrologic Unit 19040401, on left bank at Eagle, 0.1 mi upstream from Mission Creek, 1.1 mi downstream from Castalia Creek, and 11 mi downstream from the international boundary.

DRAINAGE AREA.--113,500 mi², approximately.

PERIOD OF RECORD.--January 1911 to December 1913, June 1950 to current year. Monthly discharge only for some periods, published in WSP 1372.

GAGE.--Water-stage recorder. Elevation of gage is 850 ft above sea level, from topographic map. See WSP 1936 for history of changes prior to October 1, 1963. Nonrecording gage prior to June 26, 1982 at same site and datum.

REMARKS.--Records good except for the period May 18 to 21 and estimated daily discharges, which are poor. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	197000	e66000	e45000	e33500	e27500	e23500	e21000	e26000	176000	193000	229000	121000
2	196000	e62000	e45000	e33000	e27500	e23500	e21000	e28000	194000	189000	223000	121000
3	190000	e59000	e44000	e33000	e27500	e23000	e21000	e30000	205000	188000	215000	123000
4	182000	e56000	e44000	e32500	e27000	e23000	e21000	e32000	215000	191000	207000	128000
5	174000	e54000	e43000	e32500	e27000	e23000	e21000	e34000	231000	198000	203000	129000
6	167000	e52000	e43000	e32000	e27000	e23000	e21000	e37000	257000	206000	199000	128000
7	161000	e51000	e42000	e32000	e26500	e23000	e21000	e41000	270000	218000	195000	137000
8	156000	e51000	e42000	e32000	e26500	e23000	e21000	e45000	279000	232000	192000	147000
9	155000	e52000	e41000	e31500	e26500	e22500	e21000	e50000	286000	239000	188000	149000
10	152000	e53000	e41000	e31500	e26000	e22500	e21000	e55000	288000	242000	183000	147000
11	149000	e54000	e41000	e31500	e26000	e22500	e21000	e61000	286000	235000	178000	140000
12	148000	e55000	e40000	e31000	e26000	e22500	e21000	e68000	292000	227000	173000	135000
13	146000	e56000	e40000	e31000	e25500	e22500	e21000	e76000	305000	218000	167000	132000
14	143000	e57000	e39000	e30500	e25500	e22500	e21000	e84000	323000	208000	162000	129000
15	138000	e57000	e39000	e30500	e25500	e22000	e21000	e93000	333000	200000	157000	125000
16	134000	e57000	e39000	e30500	e25000	e22000	e21000	e105000	341000	200000	153000	122000
17	131000	e56000	e38000	e30000	e25000	e22000	e21000	e115000	348000	206000	152000	119000
18	128000	e56000	e38000	e30000	e25000	e22000	e21000	126000	360000	204000	151000	116000
19	125000	e55000	e38000	e30000	e24500	e22000	e21000	122000	358000	204000	152000	115000
20	121000	e54000	e37000	e29500	e24500	e22000	e21000	131000	353000	205000	152000	114000
21	118000	e53000	e37000	e29500	e24500	e22000	e21000	133000	344000	205000	152000	115000
22	112000	e52000	e36000	e29000	e24500	e21500	e21500	e142000	335000	204000	147000	117000
23	109000	e51000	e36000	e29000	e24000	e21500	e21500	153000	318000	208000	142000	121000
24	106000	e50000	e36000	e29000	e24000	e21500	e21500	162000	297000	228000	137000	121000
25	103000	e49000	e35000	e28500	e24000	e21500	e22000	165000	281000	268000	133000	120000
26	99500	e48000	e35000	e28500	e24000	e21500	e22500	159000	265000	261000	132000	118000
27	e89000	e48000	e35000	e28500	e23500	e21500	e23000	155000	250000	282000	131000	116000
28	e82000	e47000	e34500	e28000	e23500	e21500	e23500	156000	231000	305000	129000	114000
29	e78000	e47000	e34000	e28000	---	e21500	e24000	154000	214000	305000	128000	111000
30	e73000	e46000	e34000	e28000	---	e21000	e25000	150000	200000	277000	127000	109000
31	e69000	---	e33500	e28000	---	e21000	---	156000	---	246000	123000	---
TOTAL	4131500	1604000	1205000	942000	713500	688000	645500	3044000	8435000	6992000	5112000	3739000
MEAN	133300	53470	38870	30390	25480	22190	21520	98190	281200	225500	164900	124600
MAX	197000	66000	45000	33500	27500	23500	25000	165000	360000	305000	229000	149000
MIN	69000	46000	33500	28000	23500	21000	21000	26000	176000	188000	123000	109000
AC-FT	8195000	3182000	2390000	1868000	1415000	1365000	1280000	6038000	16730000	13870000	10140000	7416000
CFSM	1.17	.47	.34	.27	.22	.20	.19	.87	2.48	1.99	1.45	1.10
IN.	1.35	.53	.39	.31	.23	.23	.21	1.00	2.76	2.29	1.68	1.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2001, BY WATER YEAR (WY)#

MEAN	74500	38070	25650	21010	18780	17210	19330	124100	225100	183200	144400	112200
MAX	133300	62500	38870	30390	28000	25480	41530	201500	456800	269500	200400	187900
(WY)	2001	1953	2001	2001	1977	1977	1990	1993	1964	1992	2000	2000
MIN	45870	24000	13000	9000	7200	7800	8650	61770	120900	108900	88710	70690
(WY)	1959	1959	1951	1951	1951	1956	1956	1964	1953	1998	1998	1998

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1950 - 2001
ANNUAL TOTAL	38480600	37251500	
ANNUAL MEAN	105100	102100	84230
HIGHEST ANNUAL MEAN			110900
LOWEST ANNUAL MEAN			61020
HIGHEST DAILY MEAN	320000	360000	545000
LOWEST DAILY MEAN	a16500	b21000	c7200
ANNUAL SEVEN-DAY MINIMUM	16500	21000	7200
MAXIMUM PEAK FLOW		362000	545000
MAXIMUM PEAK STAGE		26.83	33.85
MAXIMUM PEAK STAGE		d33.7	
ANNUAL RUNOFF (AC-FT)	76330000	73890000	61020000
ANNUAL RUNOFF (CFSM)	.93	.90	.74
ANNUAL RUNOFF (INCHES)	12.61	12.21	10.08
10 PERCENT EXCEEDS	223000	228000	199000
50 PERCENT EXCEEDS	57000	56000	45000
90 PERCENT EXCEEDS	16600	22000	16000

See Period of Record; partial years used in monthly statistics
a From Apr. 1-20
b From Mar. 30 - Apr. 21
c Feb. 1-28, 1951
d From floodmarks, backwater from ice
e Estimated

15356000 YUKON RIVER AT EAGLE--Continued
(International Gaging Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1950-57, 1962-70, 1974-76, 1978-79, and 2001.

PERIOD OF DAILY RECORD.--
SUSPENDED SEDIMENT: 1962 TO 1966.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM R BK) (72103)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)					
JUN													
04...	1916	440.0	164	7.8	10.0	745	10.9	99					
04...	1918	650.0	162	7.9	10.0	745	10.8	98					
04...	1920	800.0	159	7.9	10.0	745	10.9	99					
04...	1925	970.0	160	7.9	10.0	745	10.8	98					
04...	1927	1190	159	7.9	10.0	745	10.6	96					
20...	1415	1190	185	7.9	13.5	746	9.5	93					
20...	1418	960.0	181	7.9	13.5	746	9.5	93					
20...	1446	800.0	185	7.9	13.5	746	9.5	93					
20...	1454	650.0	184	8.0	13.5	746	9.5	93					
20...	1457	430.0	183	8.0	13.5	746	9.5	93					
JUL													
11...	1251	1190	201	8.0	14.0	747	9.2	91					
11...	1253	960.0	201	8.0	14.0	747	9.2	91					
11...	1254	800.0	202	8.0	14.0	747	9.0	90					
11...	1256	650.0	202	8.0	14.0	747	9.1	90					
11...	1257	430.0	206	8.0	14.0	747	9.1	90					
AUG													
09...	1248	430.0	218	7.5	14.5	754	9.7	96					
09...	1249	650.0	216	7.6	14.5	754	9.6	95					
09...	1250	800.0	216	7.7	14.5	754	9.6	95					
09...	1251	960.0	216	7.7	14.5	754	9.4	93					
09...	1252	1190	216	7.7	14.5	754	9.3	92					
SEP													
11...	1241	500.0	188	8.0	8.5	751	11.0	96					
11...	1244	700.0	187	8.0	8.5	751	11.1	96					
11...	1249	800.0	187	8.1	8.5	751	11.1	96					
11...	1251	960.0	187	8.0	8.5	751	11.0	96					
11...	1253	1150	186	8.1	8.5	751	10.7	93					
DATE	TIME	MEDIUM CODE	SAMPLE TYPE	STREAM WIDTH (FT) (00004)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM- PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	QUALITY ASSUR- ANCE DATA INDICA- TOR CODE (99111)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPERA- TURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)
OCT													
04...	1530	9	9	1520	17.63	180000	20	3055	1	208	8.2	-1.0	1.0
MAR													
23...	1140	9	9	1120	--	21500	20	3060	30	244	7.4	-23.0	.00
JUN													
04...	1900	9	9	1550	19.95	219000	20	3055	100	163	7.9	16.5	10.0
20...	1330	9	9	1540	26.50	355000	20	3055	100	184	7.9	--	13.6
JUL													
11...	1210	9	9	1550	20.87	230000	20	3055	30	202	8.0	18.0	14.0
AUG													
09...	1145	9	7	1550	18.09	188000	20	3055	100	216	7.6	17.5	14.6
SEP													
11...	1140	9	9	1380	15.03	140000	20	3055	30	187	8.1	--	8.4

15356000 YUKON RIVER AT EAGLE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TURBID- ITY (NTU) (00076)	TURBID- ITY LAB HACH (99872)	UV ABSOR- BANCE 254 NM, WTR FLT (UNITS/ CM) (50624)	UV ABSOR- BANCE 280 NM, (UNITS/ CM) (61726)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN DIS- OLVED (MG/L) (00300)	OXY- GEN, DIS- OLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CAL- CIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM DIS- SOLVED (MG/L AS NA) (00930)	ANC WATER UNFL- TRD FET FIELD (MG/L AS CACO3) (00410)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
OCT 04...	32	42	.204	.151	750	--	--	100	27.3	8.00	2.2	76	.92
MAR 23...	.7	4.2	.040	.028	767	10.8	73	120	34.1	9.21	2.7	99	1.16
JUN 04...	--	180	.400	.302	745	10.8	98	81	22.1	6.12	1.8	55	1.08
20...	--	270	.173	.129	746	9.5	93	92	25.2	7.09	1.7	65	.87
JUL 11...	--	.5	--	--	747	9.1	90	96	26.1	7.51	2.1	68	1.17
AUG 09...	--	--	.108	.078	754	9.5	94	100	28.3	8.06	2.5	76	1.55
SEP 11...	--	63	.192	.140	751	11.0	95	100	27.4	8.04	2.3	70	1.06
DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CARBOR- NATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SUL- FATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLOU- RIDE DIS- SOLVED (MG/L AS F) (00950)	SIL- ICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOL- IDS, RISI- DUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOL- IDS, SUM OF CON- STITU- ENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMO- NIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMO- NIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT 04...	93	.0	76	29.7	.5	E.1	7.7	141	123	.001	.042	.007	.31
MAR 23...	121	.0	99	30.7	.8	E.1	6.5	153	150	.008	1.03	.056	.08
JUN 04...	67	.0	55	19.5	.4	E.1	5.4	114	90	.001	.029	.004	.68
20...	78	.0	64	26.2	.4	E.1	6.0	130	106	<.001	.033	.005	.59
JUL 11...	81	.0	66	28.9	.6	E.1	6.3	128	113	.001	.024	.007	.41
AUG 09...	92	.0	76	31.5	.9	E.1	6.3	130	125	<.001	.021	<.002	E.38
SEP 11...	84	.0	69	32.2	.5	E.1	7.1	132	120	E.002	E.025	E.004	E.28
DATE	NITRO- GEN, AMMO- NIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	NITRO- GEN, TOTAL, SED- IMNT SUSP, (WEIGHT PERCNT) (62845)	PHOS- PHORUS SEDI- MENT SUSP. PER- CENT (30282)	ALUMI- NUM SED, SUS PER- CENT (30221)	ALUMI- NUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY SED, SUSP. (UG/G) (29816)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC SED, SUSP. (UG/G) (29818)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM SED. SUSP. (UG/G) (29820)
OCT 04...	.18	--	<.006	.001	.10	.08	6.5	21	1.0	.12	8.9	<2.0	960
MAR 23...	E.06	.004	<.006	<.007	--	--	--	2	--	.10	--	.4	--
JUN 04...	.26	.931	.007	<.007	<.10	.1	6.5	45	1.5	.14	12	.6	930
20...	E.09	.825	E.006	<.007	<.10	.1	6.7	25	1.6	.17	11	.7	910
JUL 11...	.12	.503	<.006	<.007	<.10	.1	6.5	30	1.6	.18	11	.5	830
AUG 09...	.11	.764	<.006	<.007	<.10	.1	6.8	23	1.7	.20	13	.6	700
SEP 11...	E.14	E.240	<.006	<.007	<.10	.09	6.6	34	1.3	.13	11	.5	890

15356000 YUKON RIVER AT EAGLE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	BAR-IUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM SED. (UG/G) (29822)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON DIS-SOLVED (UG/L AS B) (01020)	CAD-MIUM SED. (UG/G) (29826)	CAD-MIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM SED. (UG/G) (29829)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT MENT (UG/G) (35031)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER SED. (UG/G) (29832)	COP- PER, DIS-SOLVED (UG/L AS CU) (01040)	IRON SEDI-MENT SUSP. (30269)
OCT													
04...	36.7	1	<.06	<16	.6	.04	95	E.6	13	.14	28	2.0	3.3
MAR													
23...	52.0	--	<.06	12	--	E.03	--	<.8	--	.06	--	.9	--
JUN													
04...	33.4	2	<.06	E6	.7	E.03	93	<.8	16	.12	33	3.6	3.8
20...	39.5	2	<.06	8	.6	<.04	97	<.8	18	.08	35	2.5	3.8
JUL													
11...	36.0	2	E.04	8	.5	<.04	98	<.8	18	.07	35	2.2	3.8
AUG													
09...	40.0	1	<.06	E6	.5	<.04	94	<.8	17	.06	34	1.2	4.3
SEP													
11...	38.2	1	<.06	12	.6	E.02	110	E.4	15	.08	31	2.1	3.6
DATE	IRON DIS-SOLVED (UG/L AS FE) (01046)	LEAD SED. (UG/G) (29836)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITH-IUM SEDI-MENT (UG/G) (35050)	LITH-IUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE SED. (UG/G) (29839)	MANGA-NESE DIS-SOLVED (UG/L AS MN) (01056)	MER-CURY SED. (UG/G) (29841)	MOLYB-DENUM SED. (UG/G) (29843)	MOLYB-DENUM, DIS-SOLVED (UG/LAS MO) (01060)	NICKEL SED. (UG/G) (29845)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM SED. (UG/G) (29847)
OCT													
04...	30	11	E.04	22	<3.9	720	5.9	.05	<5	1.0	48	2.50	M
MAR													
23...	M	--	.10	--	2.3	--	1.5	--	--	1.3	--	.74	--
JUN													
04...	100	14	E.05	22	1.6	850	7.2	.05	2	.7	46	2.02	M
20...	30	10	<.08	27	2.0	840	5.1	.05	2	.8	47	1.35	M
JUL													
11...	20	9.0	<.08	27	2.7	780	3.0	.06	3	1.0	51	.99	M
AUG													
09...	M	10	<.08	25	2.7	760	1.5	.01	2	1.3	49	.29	M
SEP													
11...	40	10	<.08	23	2.5	760	4.2	.03	4	1.1	56	.77	M
DATE	SELE-NIUM DIS-SOLVED (UG/L AS SE) (01145)	SILVER SED. (UG/G) (29850)	SIL-VER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM SEDI-MENT (UG/G) (35040)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	THAL-LIUM SED. (UG/G) (49955)	TITA-NIUM SEDI-MENT (UG/G) (30317)	VANA-DIUM SED. (UG/G) (29853)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC SED. (UG/G) (29855)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	URA-NIUM SEDI-MENT (UG/G) (35046)	URA-NIUM NATU-RAL DIS-SOLVED (UG/L AS U) (22703)
OCT													
04...	<2.4	<.500000	<1.0	350	129	<50	.410	120	<10.0	120	2	<50	.75
MAR													
23...	.7	--	<1.0	--	171	--	--	--	.6	--	3	--	1.02
JUN													
04...	.4	<.500000	<1.0	330	102	<50	.460	130	.5	110	1	<50	.66
20...	.5	M	<1.0	320	108	<50	.490	130	.5	110	1	<50	.67
JUL													
11...	E.2	M	<1.0	330	124	<50	.460	120	.5	100	5	<50	.75
AUG													
09...	.5	<.500000	<1.0	360	136	<50	.460	120	.4	97	<1	<50	.89
SEP													
11...	.4	<.500000	<1.0	390	131	<50	.430	120	.4	100	1	<50	.85

15356000 YUKON RIVER AT EAGLE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC PARTICU- LATE TOTAL (MG/L AS C) (00689)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON SED, SUSP. PERCENT (30244)	CARBON, ORGANIC SUS- PENDEd, TOTAL PERCENT (50465)	NITRO- GEN, PARTICU- LATE WAT FLT SUSP (MG/L AS N) (49570)	SEDI- MENT SUSP., FLOW- THROUGH CENTRIF (MG/L) (50279)	SEDI- MENT, DIS- CHARGE, SUS- PENDEd (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEd (T/DAY) (80155)	SED SUSP. SIEVE DIEM. % FINER THAN .062 MM (70331)
OCT											
04...	E5.9	<.1	2.2	2.2	2.3	1.0	.186	175	187	90900	45
MAR											
23...	1.7	<.1	<.1	<.1	--	--	<.022	--	2	116	--
JUN											
04...	10.0	<.1	16.0	16.0	2.3	1.1	.628	817	883	522000	62
20...	4.5	1.8	5.5	7.3	2.1	.8	.253	831	873	837000	67
JUL											
11...	4.8	4.9	3.5	8.3	2.2	1.0	.174	521	554	344000	68
AUG											
09...	3.3	11.0	3.8	15.0	2.6	.6	E.162	723	730	371000	79
SEP											
11...	E6.0	E.2	E3.6	E3.9	2.2	1.0	E.116	205	207	78200	55

15388960 PORCUPINE RIVER NEAR INTERNATIONAL BOUNDARY
(International Gaging Station)

LOCATION.--Lat 67°25'27", long 140°53'28", 3.1 mi upstream from old townsite of Ramparts House, at Alaska-Yukon Territory Boundary.

DRAINAGE AREA.--23,100 mi², approximately.

PERIOD OF RECORD.--October 1987 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 600 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Differences between data published herein and corresponding data in the reports of the Water Survey of Canada are due to variations in automated program techniques. After December 1978, data published in reports of the Water Survey of Canada are in International System (SI) units, and have been converted to inch-pound units for this report. Because the Water Survey of Canada computes discharge records by calendar year, data reported here are one year prior to those reported for U.S. gages.

COOPERATION.--Discharge records furnished by the Water Survey of Canada.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e4450	e1430	e975	e802	e759	e727	e717	e759	89700	14600	29300	17700
2	e4100	e1400	e971	e798	e759	e727	e717	e766	91500	13100	25900	16000
3	e3740	e1370	e960	e798	e759	e727	e717	e780	90000	11800	21900	14100
4	e3530	e1350	e946	e798	e756	e727	e720	e791	88600	11100	19100	12600
5	e3440	e1320	e936	e794	e756	e727	e720	e798	84000	10800	16700	11300
6	e3390	e1310	e922	e794	e756	e727	e720	e809	80900	12300	14200	10300
7	e3320	e1290	e918	e794	e752	e727	e720	e823	79800	13900	12100	9530
8	e3200	e1280	e911	e794	e752	e724	e720	e844	80500	13900	10600	8860
9	e3200	e1270	e904	e791	e752	e724	e724	e865	81600	15200	9750	8440
10	e3170	e1250	e897	e791	e752	e724	e724	e883	90000	19800	9390	e8190
11	e3060	e1220	e886	e791	e749	e724	e724	e929	96400	21500	9640	e7870
12	e2560	e1200	e883	e787	e749	e724	e727	e996	93900	18900	9960	e7630
13	e2320	e1180	e876	e787	e745	e724	e727	e1100	89300	15500	10100	e7380
14	e2250	e1160	e869	e784	e745	e724	e727	e1340	80200	12900	11700	e7060
15	e2230	e1140	e862	e784	e742	e724	e731	e1840	70300	11600	14100	e6570
16	e2250	e1130	e858	e780	e742	e724	e731	e3060	64600	12000	15400	e6180
17	e2320	e1120	e851	e780	e742	e724	e731	e5050	65300	16800	42400	e6070
18	e2370	e1110	e847	e777	e742	e724	e734	e6920	67100	22400	62500	e5930
19	e2380	e1090	e844	e777	e738	e724	e734	e9500	66000	21800	51600	e5680
20	e2380	e1080	e840	e773	e738	e724	e734	e13000	63600	18100	39900	e5540
21	e2330	e1060	e837	e773	e734	e724	e738	e17800	59700	14700	33100	e5400
22	e2290	e1050	e826	e770	e734	e724	e738	e23300	52600	12900	30600	e5330
23	e2230	e1030	e826	e770	e734	e724	e738	e30500	43800	17500	29300	e5260
24	e1920	e1020	e823	e770	e734	e724	e742	e38800	36400	23200	27700	e5080
25	e1780	e1020	e823	e770	e731	e724	e742	e49400	30600	21000	24800	e4840
26	e1720	e1010	e819	e770	e731	e724	e742	e67100	26700	17500	21900	e4700
27	e1660	e1010	e819	e766	e727	e720	e745	e70600	23400	14800	19400	e4590
28	e1600	e999	e816	e766	e727	e720	e745	e81200	20500	14500	17600	e4450
29	e1550	e989	e816	e766	e727	e720	e749	e84700	18100	16100	16700	e4270
30	e1500	e985	e812	e763	---	e717	e756	e87200	16100	18800	17500	e4060
31	e1460	---	e802	e763	---	e717	---	89700	---	26200	18500	---
TOTAL	79700	34873	26975	24221	21564	22439	21934	692153	1941200	505200	693340	230910
MEAN	2571	1162	870	781	744	724	731	22330	64710	16300	22370	7697
MAX	4450	1430	975	802	759	727	756	89700	96400	26200	62500	17700
MIN	1460	985	802	763	727	717	717	759	16100	10800	9390	4060
AC-FT	158100	69170	53500	48040	42770	44510	43510	1373000	3850000	1002000	1375000	458000
CFSM	.11	.05	.04	.03	.03	.03	.03	.97	2.80	.71	.97	.33
IN.	.13	.06	.04	.04	.03	.04	.04	1.11	3.13	.81	1.12	.37

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2000, BY WATER YEAR (WY)

	MEAN	4652	1781	1062	788	661	631	768	37330	43810	15030	18610	17150
MAX	8241	3161	1479	991	855	852	1711	63160	86470	29580	37940	34320	
(WY)	1996	1999	1999	1999	1998	1998	1998	1999	1992	1994	1991	1995	
MIN	2571	1122	870	551	398	383	562	5991	20410	6041	10090	7697	
(WY)	2000	1997	2000	1997	1997	1997	1997	1997	1999	1999	1994	2000	

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR				FOR 2000 WATER YEAR				WATER YEARS 1988 - 2000			
ANNUAL TOTAL	2200905				4294509							
ANNUAL MEAN	6030				11730				11890			
HIGHEST ANNUAL MEAN									16090			1995
LOWEST ANNUAL MEAN									6569			1999
HIGHEST DAILY MEAN	49100				96400				248000		Jun 1	1992
LOWEST DAILY MEAN	a671				b717				c367		Mar 3	1997
ANNUAL SEVEN-DAY MINIMUM	671				718				369		Mar 1	1997
MAXIMUM PEAK FLOW					97800				250000		Jun 1	1992
MAXIMUM PEAK STAGE					38.89				50.76		Jun 1	1992
INSTANTANEOUS LOW FLOW									470		Mar 19	1990
ANNUAL RUNOFF (AC-FT)	4365000				8518000				8617000			
ANNUAL RUNOFF (CFSM)	.26				.51				.51			
ANNUAL RUNOFF (INCHES)	3.54				6.92				7.00			
10 PERCENT EXCEEDS	18800				34100				33900			
50 PERCENT EXCEEDS	1180				1190				1980			
90 PERCENT EXCEEDS	701				727				614			

a From Apr. 29 to May 7
b From Mar. 30 to Apr. 3
c From Mar. 3 to 6, 1997
e Estimated

15453500 YUKON RIVER NEAR STEVENS VILLAGE

LOCATION.--Lat 65°52'32", long 149°43'04", in SE¹/₄ SW¹/₄ sec. 7, T. 12 N., R. 10 W. (Livengood D-6 quad), Hydrologic Unit 19040404, on right bank, 115 ft upstream from bridge at MP 56.0 on Dalton Highway, 0.5 mi downstream from Woodcamp Creek, 2.5 mi upstream from Ray River, and 21 mi southwest of Stevens Village.

DRAINAGE AREA.--196,300 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder and supplementary water-stage recorder on bridge pier at same site and datum. Datum of gage is 240.00 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge observed, 950,000 ft³/s, June 15-16, 1964, "at Rampart" (station 15468000), drainage area, 199,400 mi², approximately.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	240000	e81000	e48000	e35000	e29000	e25000	e23000	e26500	436000	301000	340000	170000
2	244000	e75000	e48000	e35000	e28500	e25000	e23000	e27000	432000	288000	339000	165000
3	242000	e70000	e48000	e34000	e28500	e25000	e23000	e28000	421000	274000	322000	161000
4	237000	e65000	e47000	e34000	e28500	e24500	e23000	e29000	410000	258000	302000	156000
5	231000	e61000	e46000	e34000	e28000	e24500	e23000	e30000	407000	246000	286000	153000
6	225000	e58000	e46000	e34000	e28000	e24500	e23000	e32000	412000	238000	275000	151000
7	218000	e56000	e45000	e33500	e28000	e24500	e23000	e34000	426000	234000	265000	153000
8	209000	e55000	e45000	e33500	e27500	e24500	e23000	e36000	448000	232000	257000	155000
9	196000	e55000	e44000	e33000	e27500	e24500	e23000	e39000	475000	241000	249000	156000
10	190000	e56000	e44000	e33000	e27500	e24000	e23000	e42000	503000	260000	241000	157000
11	182000	e57000	e43000	e33000	e27000	e24000	e23000	e45000	525000	275000	234000	163000
12	174000	e58000	e43000	e32500	e27000	e24000	e23000	e49000	541000	283000	228000	173000
13	165000	e59000	e42000	e32500	e27000	e24000	e23000	e55000	552000	293000	222000	182000
14	163000	e60000	e42000	e32000	e26500	e24000	e23000	e61000	550000	301000	215000	185000
15	159000	e60000	e41000	e32000	e26500	e24000	e23000	e68000	534000	298000	210000	181000
16	163000	e60000	e41000	e31500	e26500	e24000	e23000	e78000	516000	289000	208000	176000
17	165000	e59000	e40000	e31500	e26500	e24000	e23000	e90000	507000	279000	207000	173000
18	160000	e59000	e40000	e31000	e26000	e23500	e23000	e110000	502000	270000	211000	169000
19	e150000	e58000	e40000	e31000	e26000	e23500	e23000	e130000	496000	261000	219000	163000
20	e142000	e57000	e39000	e31000	e26000	e23500	e23000	e160000	488000	256000	229000	157000
21	e138000	e56000	e39000	e30500	e26000	e23500	e23000	e200000	480000	255000	237000	152000
22	e132000	e55000	e39000	e30500	e25500	e23500	e23000	e300000	474000	253000	247000	147000
23	e126000	e55000	e38000	e30500	e25500	e23500	e23500	e320000	463000	247000	256000	143000
24	e121000	e54000	e38000	e30000	e25500	e23500	e23500	314000	443000	241000	255000	140000
25	e117000	e53000	e38000	e30000	e25500	e23500	e24000	281000	420000	237000	242000	139000
26	e114000	e52000	e37000	e30000	e25000	e23500	e24000	279000	396000	235000	226000	139000
27	e111000	e51000	e37000	e29500	e25000	e23500	e24500	297000	371000	251000	211000	140000
28	e106000	e51000	e37000	e29500	e25000	e23500	e25000	325000	349000	288000	198000	140000
29	e100000	e50000	e36000	e29500	---	e23000	e25500	376000	330000	301000	188000	138000
30	e93000	e49000	e36000	e29000	---	e23000	e26000	409000	314000	307000	180000	136000
31	e87000	---	e36000	e29000	---	e23000	---	428000	---	326000	175000	---
TOTAL	5100000	1745000	1283000	985000	749000	741500	702000	4698500	13621000	8318000	7474000	4713000
MEAN	164500	58170	41390	31770	26750	23920	23400	151600	454000	268300	241100	157100
MAX	244000	81000	48000	35000	29000	25000	26000	428000	552000	326000	340000	185000
MIN	87000	49000	36000	29000	25000	23000	23000	26500	314000	232000	175000	136000
AC-FT10120000	3461000	2545000	1954000	1486000	1471000	1392000	9319000	27020000	16500000	14820000	9348000	
CFSM	.84	.30	.21	.16	.14	.12	.12	.77	2.31	1.37	1.23	.80
IN.	.97	.33	.24	.19	.14	.14	.13	.89	2.58	1.58	1.42	.89

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2001, BY WATER YEAR (WY)

MEAN	99620	50310	36570	29880	25450	22490	22220	206300	342800	234200	199600	163100
MAX	164500	69670	48450	37680	32140	28970	28170	373000	614100	320200	255100	229500
(WY)	2001	1978	1983	1977	1981	1981	1981	1991	1992	1992	2000	2000
MIN	75340	34530	26770	23550	19320	16000	14800	90680	226800	178900	142400	116500
(WY)	1993	1990	1990	1996	1999	1999	1997	1992	1995	1996	1989	1989

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1977 - 2001
ANNUAL TOTAL	53092800	50130000	
ANNUAL MEAN	145100	137300	119800
HIGHEST ANNUAL MEAN			144400
LOWEST ANNUAL MEAN			93910
HIGHEST DAILY MEAN	508000	Jun 23	823000
LOWEST DAILY MEAN	a20000	Apr 5	c14000
ANNUAL SEVEN-DAY MINIMUM	20000	Apr 5	14000
MAXIMUM PEAK FLOW		554000	827000
MAXIMUM PEAK STAGE		50.17	59.60
ANNUAL RUNOFF (AC-FT)	105300000	99430000	86800000
ANNUAL RUNOFF (CFSM)	.74	.70	.61
ANNUAL RUNOFF (INCHES)	10.06	9.50	8.29
10 PERCENT EXCEEDS	303000	323000	278000
50 PERCENT EXCEEDS	60000	58000	56000
90 PERCENT EXCEEDS	20200	23500	22000

- a From Apr. 5 to 20
b From Mar. 29 to Apr. 22
c From Apr. 14 to 25
e Estimated

15453500 YUKON RIVER NEAR STEVENS VILLAGE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970-72, 1978, and 2001.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM R BK) (72103)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)
JUN								
02...	1820	350.0	123	7.4	9.0	762	10.2	88
02...	1824	750.0	125	7.5	9.0	762	10.1	87
02...	1827	1070	124	7.6	9.0	762	10.1	87
02...	1835	1420	126	7.5	9.0	762	10.1	87
02...	1839	1790	126	7.6	9.0	762	10.0	86
18...	1657	340.0	180	7.8	14.5	764	9.5	93
18...	1700	644.0	178	7.8	14.5	764	9.5	93
18...	1703	974.0	181	7.8	14.5	764	9.5	93
18...	1706	1318	181	7.8	14.5	764	9.5	93
18...	1709	1708	181	7.8	14.5	764	9.5	93
JUL								
13...	1512	1710	205	7.6	15.5	761	9.0	90
13...	1514	1320	206	7.6	15.5	761	8.9	90
13...	1515	970.0	206	7.6	15.5	761	8.9	90
13...	1517	640.0	206	7.6	15.5	761	8.9	90
13...	1519	340.0	206	7.6	15.5	761	8.9	89
AUG								
14...	1642	1700	228	7.6	14.0	762	9.5	92
14...	1644	1360	226	7.7	14.0	762	9.6	93
14...	1646	1050	225	7.7	14.0	762	9.6	93
14...	1650	700.0	227	7.8	14.0	762	9.6	93
14...	1652	350.0	228	7.8	14.0	762	9.4	91
SEP								
21...	1355	380.0	232	7.6	7.5	753	11.1	94
21...	1357	750.0	233	7.7	7.5	753	11.2	94
21...	1359	1020	233	7.7	7.5	753	11.1	94
21...	1401	1350	233	7.8	7.5	753	11.1	94
21...	1402	1670	233	7.8	7.5	753	11.1	94

DATE	TIME	MEDIUM CODE	SAMPLE TYPE	STREAM WIDTH (FT) (00004)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM- PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	QUALITY ASSUR- ANCE DATA INDICA- TOR CODE (99111)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPERA- TURE AIR (DEG C) (00020)	TEMP- ERATURE WATER (DEG C) (00010)
OCT													
02...	1550	9	9	2020	35.44	260000	20	8010	30	206	8.1	-0.5	2.5
MAR													
21...	1630	9	9	1950	--	23400	20	8010	30	267	7.2	-23.0	.00
JUN													
02...	1800	9	9	2190	45.09	423000	20	3055	30	125	7.5	15.0	9.2
18...	1620	9	7	2250	48.12	480000	20	3055	30	180	7.8	24.0	14.3
JUL													
13...	1430	9	9	1970	38.25	296000	20	3055	100	206	7.6	21.0	15.5
AUG													
14...	1515	9	9	2130	33.57	214000	20	3055	30	227	7.7	--	14.1
SEP													
21...	1230	9	9	2100	28.96	152000	20	3055	100	233	7.7	15.0	7.5

15453500 YUKON RIVER NEAR STEVENS VILLAGE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TURBID- ITY (NTU) (00076)	TURBID- ITY LAB HACH (NTU) (99872)	UV ABSOR- BANCE 254 NM, WTR FLT (UNITS/ CM) (50624)	UV ABSOR- BANCE 280 NM, (UNITS/ CM) (61726)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN DIS- OLVED (MG/L) (00300)	OXY- GEN, DIS- OLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CAL- CIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM DIS- SOLVED (MG/L AS NA) (00930)	ANC WATER UNFL- TRD FET FIELD MG/L AS CACO3 (00410)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
OCT 02...	64	120	--	--	763	13.2	97	100	28.5	7.79	2.5	73	.91
MAR 21...	1.9	3.7	.045	.032	787	8.5	56	150	42.3	10.1	2.8	113	1.13
JUN 02...	--	150	.636	.480	762	10.1	88	66	19.7	3.98	.7	48	.89
18...	--	180	.236	.174	764	9.5	93	89	25.7	5.92	1.5	64	.92
JUL 13...	--	300	.178	.131	761	8.9	89	98	27.2	7.19	2.1	--	1.21
AUG 14...	--	4.3	.120	.086	762	9.5	92	110	30.3	8.14	2.7	80	1.53
SEP 21...	--	27	.167	.121	753	11.1	94	110	30.1	8.14	2.4	79	.94
DATE	BICAR- BONATE DIS IT FIELD MG/L AS HCO3 (00453)	CARBOR- NATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SUL- FATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLOU- RIDE DIS- SOLVED (MG/L AS F) (00950)	SIL- ICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOL- IDS, RISI- DUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOL- IDS, SUM OF CON- STITU- ENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMO- NIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMO- NIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT 02...	88	.0	72	28.1	.6	<.1	7.3	135	119	.001	.062	<.002	.42
MAR 21...	138	.0	113	33.1	1.1	E.1	6.8	173	166	.001	<.005	<.002	E.05
JUN 02...	58	.0	47	12.9	.5	E.1	3.2	115	71	.002	.021	.004	.92
18...	77	.0	64	22.1	.4	<.2	4.6	121	99	.001	.033	.003	.72
JUL 13...	--	--	--	28.3	.4	E.1	5.7	131	116	.002	.040	.003	.29
AUG 14...	95	.0	78	33.5	.8	.2	6.1	152	131	<.001	.029	.012	.41
SEP 21...	95	.0	78	35.2	.5	<.2	6.0	145	130	.001	.028	.002	.23
DATE	NITRO- GEN, AMMO- NIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	NITRO- GEN, TOTAL, SED- IMNT SUSP, (WEIGHT PERCENT) (62845)	PHOS- SED- MENT SUSP. PER- CENT (30282)	ALUMI- NUM SED, SUS PER- CENT (30221)	ALUMI- NUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY DIS- SED, SUSP. (UG/G) (29816)	ANTI- MONY DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC SED, SUSP. (UG/G) (29818)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM SED. SUSP. (UG/G) (29820)
OCT 02...	.20	.313	E.003	<.001	.08	.09	6.6	22	.9	.14	11	<2.0	850
MAR 21...	E.07	.016	E.003	.070	--	--	--	2	--	.09	--	.3	--
JUN 02...	.43	.590	.015	<.007	.13	.09	6.6	65	1.3	.11	11	.5	900
18...	.23	.523	.016	<.007	.12	.10	6.5	23	1.5	.19	12	.6	980
JUL 13...	.14	.489	<.006	<.007	<.10	.10	6.4	26	1.7	.19	12	.6	800
AUG 14...	.22	.467	<.006	<.007	<.10	.10	6.7	20	1.9	.20	14	.6	760
SEP 21...	.13	.161	<.006	<.007	<.10	.08	6.2	20	1.4	.15	11	.6	950

15453500 YUKON RIVER NEAR STEVENS VILLAGE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	BAR-IUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM SED. (UG/G) (29822)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON DIS-SOLVED (UG/L AS B) (01020)	CAD-MIUM SED. (UG/G) (29826)	CAD-MIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM SED. (UG/G) (29829)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT MENT (UG/G) (35031)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER SED. (UG/G) (29832)	COP- PER, DIS-SOLVED (UG/L AS CU) (01040)	IRON SEDI-MENT SUSP. PERCENT (30269)
OCT 02...	42.1	1	<.06	<16	.5	E.03	96	E.5	17	.12	35	2.6	3.8
MAR 21...	64.8	--	<.06	9	--	<.04	--	<.8	--	.07	--	.8	--
JUN 02...	32.6	2	<.06	E5	.6	E.02	100	<.8	15	.22	28	4.4	3.6
18...	44.3	2	<.06	E6	.6	E.03	99	<.8	18	.09	36	2.9	3.8
JUL 13...	43.8	2	<.06	8	.6	E.03	96	<.8	18	.10	37	2.8	4.0
AUG 14...	49.5	1	<.06	20	.6	<.04	96	<.8	17	.07	36	2.0	4.3
SEP 21...	41.8	1	<.06	7	.7	<.04	100	<.8	15	.08	28	2.0	3.2

DATE	IRON DIS-SOLVED (UG/L AS FE) (01046)	LEAD SED. (UG/G) (29836)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITH-IUM SEDI-MENT (UG/G) (35050)	LITH-IUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE SED. (UG/G) (29839)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MER-CURY SED. (UG/G) (29841)	MOLYB-DENUM SUSP. (UG/G) (29843)	MOLYB-DENUM, DIS-SOLVED (UG/LAS MO) (01060)	NICKEL SED. (UG/G) (29845)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM SED. (UG/G) (29847)
OCT 02...	50	10	E.04	24	<3.9	730	4.5	.04	<5	.9	53	2.03	M
MAR 21...	10	--	<.08	--	2.5	--	8.9	--	--	1.1	--	.25	--
JUN 02...	230	17	.14	32	2.4	720	18.5	.05	2	.4	48	3.15	M
18...	60	13	.08	33	2.0	840	4.8	.15	2	.7	54	1.49	M
JUL 13...	20	11	E.07	30	2.5	770	2.4	.08	3	.9	55	1.22	M
AUG 14...	M	13	<.08	29	3.0	780	3.1	.04	3	1.2	52	.38	M
SEP 21...	50	10	.17	24	2.9	740	6.2	.03	3	.9	53	.93	M

DATE	SELE-NIUM DIS-SOLVED (UG/L AS SE) (01145)	SILVER SED. (UG/G) (29850)	SIL- VER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM SEDI-MENT (UG/G) (35040)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	THAL-LIUM SED (UG/G) (49955)	TITA-NIUM SEDI-MENT SUSP. PERCENT (30317)	VANA-DIUM SED. (UG/G) (29853)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC SED. (UG/G) (29855)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	URA-NIUM SEDI-MENT (UG/G) (35046)	URA-NIUM NATU-RAL DIS-SOLVED (UG/L AS U) (22703)
OCT 02...	<2.4	<.500000	<1.0	310	127	<50	.420	120	<10.0	100	<1	<50	.75
MAR 21...	.6	--	<1.0	--	176	--	--	--	.5	--	2	--	1.03
JUN 02...	<.3	<.500000	<1.0	260	61.2	<50	.440	140	1.1	110	1	<50	.37
18...	.4	<.500000	<1.0	270	97.0	<50	.470	140	.7	130	1	<50	.64
JUL 13...	.4	M	<1.0	290	123	<50	.440	120	.5	110	1	<50	.75
AUG 14...	<.3	<.500000	<1.0	310	145	<50	.430	130	.4	110	<1	<50	.84
SEP 21...	.5	<.500000	<1.0	350	128	<50	.400	120	.5	110	2	<50	.76

15453500 YUKON RIVER NEAR STEVENS VILLAGE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC PARTICU- LATE TOTAL (MG/L AS C) (00689)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON SED, SUSP. PERCENT (30244)	CARBON, ORGANIC SUS- PENDEd, TOTAL PERCENT (50465)	NITRO- GEN, PARTICU- LATE WAT FLT SUSP (MG/L AS N) (49570)	SEDI- MENT SUSP., FLOW- THROUGH CENTRIF (MG/L) (50279)	SEDI- MENT, DIS- CHARGE, SUS- PENDEd (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEd (T/DAY) (80155)	SED SUSP. SIEVE DIEM. % FINER THAN .062 MM (70331)
OCT											
02...	E7.2	--	--	--	2.1	1.1	.059	305	302	212000	80
MAR											
21...	1.9	<.1	.2	.3	--	--	<.022	--	11	695	--
JUN											
02...	17	2.2	5.1	7.3	2.2	1.5	.418	599	622	710000	71
18...	6.6	2.4	5.7	8.1	2.2	1.3	.371	483	504	653000	79
JUL											
13...	5.9	1.1	6.1	7.2	2.6	1.1	.133	502	507	405000	79
AUG											
14...	3.5	4.4	6.0	10	2.5	1.0	.184	453	466	269000	83
SEP											
21...	5.0	.6	1.7	2.3	2.0	1.2	.077	164	168	68900	48

15477730 LIESE CREEK NEAR BIG DELTA

LOCATION.--Lat 64°26'53", long 144°52'59", in SW $\frac{1}{4}$ sec.25, T.5 S., R.14 E., (Big Delta B-2 quad), Hydrologic Unit 19040503, on right bank, 1.7 mi upstream from mouth, 1.5 mi east of Pogo Mine Camp site, and 34 mi northeast of Big Delta.

DRAINAGE AREA.--1.08 mi².

PERIOD OF RECORD.--October 1999 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2200 ft above sea level, from topographic map.

REMARKS.--Records fair except for discharges below 0.2 ft³/s, estimated daily discharges and the period July 30 to September 24 which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.90	e.14	e.00	e.00	e.00	e.00	e.00	e.36	.89	.80	2.7	.42
2	e.80	e.14	e.00	e.00	e.00	e.00	e.00	e.30	.91	.97	2.2	.45
3	e.70	e.14	e.00	e.00	e.00	e.00	e.00	e.28	1.0	.58	2.0	.50
4	e.62	e.12	e.00	e.00	e.00	e.00	e.00	e.26	1.1	.43	1.7	.49
5	e.58	e.12	e.00	e.00	e.00	e.00	e.00	e.24	1.3	.46	1.6	.48
6	e.56	e.12	e.00	e.00	e.00	e.00	e.00	e.26	1.1	1.2	1.5	.45
7	e.54	e.10	e.00	e.00	e.00	e.00	e.00	e.30	2.0	3.6	1.5	.47
8	e.52	e.10	e.00	e.00	e.00	e.00	e.00	e.32	3.9	2.9	1.3	.50
9	e.48	e.10	e.00	e.00	e.00	e.00	e.00	e.36	1.7	1.7	1.3	.53
10	e.44	e.10	e.00	e.00	e.00	e.00	e.00	e.44	1.1	1.4	1.0	.53
11	e.40	e.10	e.00	e.00	e.00	e.00	e.00	e.46	.84	1.0	1.1	.53
12	e.38	e.10	e.00	e.00	e.00	e.00	e.00	e.50	.72	.87	1.1	.52
13	e.36	e.10	e.00	e.00	e.00	e.00	e.00	e.56	.61	.77	1.1	.50
14	e.34	e.08	e.00	e.00	e.00	e.00	e.00	e.62	.65	.78	.78	.46
15	e.34	e.08	e.00	e.00	e.00	e.00	e.00	e.74	.70	.70	.69	.42
16	e.32	e.08	e.00	e.00	e.00	e.00	e.00	e.80	.60	.53	.66	.43
17	e.30	e.08	e.00	e.00	e.00	e.00	e.00	e.84	.55	.42	.58	.43
18	e.30	e.08	e.00	e.00	e.00	e.00	e.00	e.96	.47	.41	.59	.44
19	e.28	e.08	e.00	e.00	e.00	e.00	e.00	e1.1	.41	.42	.58	.42
20	e.28	e.08	e.00	e.00	e.00	e.00	e.00	e1.6	.34	.42	.48	.43
21	e.26	e.08	e.00	e.00	e.00	e.00	e.00	e2.3	.27	.41	.54	.43
22	e.24	e.06	e.00	e.00	e.00	e.00	e.02	e3.5	.22	.36	.57	.42
23	e.22	e.06	e.00	e.00	e.00	e.00	e.04	e6.6	.19	.35	.49	.40
24	e.22	e.06	e.00	e.00	e.00	e.00	e.06	e4.6	.14	.72	.54	.40
25	e.20	e.06	e.00	e.00	e.00	e.00	e.08	e3.4	.11	.90	.55	.38
26	e.20	e.04	e.00	e.00	e.00	e.00	e.08	e2.5	.08	.74	.59	.35
27	e.18	e.04	e.00	e.00	e.00	e.00	e.10	2.0	.15	1.3	.59	.31
28	e.18	e.02	e.00	e.00	e.00	e.00	e.20	1.9	.27	1.4	.57	.30
29	e.16	e.02	e.00	e.00	---	e.00	e.30	.99	.44	5.5	.54	.31
30	e.16	e.00	e.00	e.00	---	e.00	e.38	.87	.86	5.7	.53	.30
31	e.16	---	e.00	e.00	---	e.00	---	.90	---	3.7	.44	---
TOTAL	11.62	2.48	0.00	0.00	0.00	0.00	1.26	40.86	23.62	41.44	30.41	13.00
MEAN	.37	.083	.000	.000	.000	.000	.042	1.32	.79	1.34	.98	.43
MAX	.90	.14	.00	.00	.00	.00	.38	6.6	3.9	5.7	2.7	.53
MIN	.16	.00	.00	.00	.00	.00	.00	.24	.08	.35	.44	.30
MED	.32	.08	.00	.00	.00	.00	.00	.80	.63	.78	.66	.43
AC-FT	23	4.9	.00	.00	.00	.00	2.5	81	47	82	60	26
CFSM	.35	.08	.00	.00	.00	.00	.04	1.22	.73	1.24	.91	.40
IN.	.40	.09	.00	.00	.00	.00	.04	1.41	.81	1.43	1.05	.45

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2001, BY WATER YEAR (WY)

	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
MEAN	.20	.041	.000	.000	.000	.000	.021	1.47	1.55	.86	1.58	.93
MAX	.37	.083	.000	.000	.000	.000	.042	1.62	2.31	1.34	2.17	1.43
(WY)	2001	2001	2000	2000	2000	2000	2001	2000	2000	2001	2000	2000
MIN	.032	.000	.000	.000	.000	.000	.000	1.32	.79	.39	.98	.43
(WY)	2000	2000	2000	2000	2000	2000	2000	2001	2001	2000	2001	2001

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 2000 - 2001

ANNUAL TOTAL	255.69	164.69		
ANNUAL MEAN	.70	.45	.56	
HIGHEST ANNUAL MEAN			.66	2000
LOWEST ANNUAL MEAN			.45	2001
HIGHEST DAILY MEAN	7.0 May 22	6.6 May 23	7.0 May 22	2000
LOWEST DAILY MEAN	a.00 Jan 1	b.00 Nov 30	.00 Oct 30	1999
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Nov 30	.00 Oct 30	1999
MAXIMUM PEAK FLOW		8.0 Jul 29	9.6 Aug 13	2000
MAXIMUM PEAK STAGE		20.32 Jul 29	20.39 Aug 13	2000
MAXIMUM PEAK STAGE		c22.2 May 23		
ANNUAL RUNOFF (AC-FT)	507	327	404	
ANNUAL RUNOFF (CFSM)	.65	.42	.52	
ANNUAL RUNOFF (INCHES)	8.81	5.67	7.01	
10 PERCENT EXCEEDS	2.4	1.1	1.6	
50 PERCENT EXCEEDS	.10	.16	.06	
90 PERCENT EXCEEDS	.00	.00	.00	

a Jan. 1 to May 7

b Nov. 30 to Apr. 21

c From floodmarks backwater from ice

e Estimated

15477740 GOODPASTER RIVER NEAR BIG DELTA

LOCATION.--Lat 64°27'02", long 144°56'32", in SE¹/₄ sec.27, T.5 S., R.14 E., (Big Delta B-2 quad), Hydrologic Unit 19040503, on left bank, 0.2 mi northwest of Pogo Mine Camp site, 7 mi upstream from Central Creek, and 34 mi northeast of Big Delta.

DRAINAGE AREA.--677 mi².

PERIOD OF RECORD.--August 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1350 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	844	e160	e130	e96	e86	e80	e74	e310	773	888	2730	591
2	682	e160	e130	e96	e86	e80	e74	e300	959	814	1940	579
3	606	e150	e120	e94	e86	e80	e74	e280	1090	708	1530	796
4	580	e140	e120	e94	e84	e78	e74	e270	1090	594	1310	834
5	e570	e140	e120	e94	e84	e78	e74	e260	1470	538	1150	785
6	e560	e140	e120	e94	e84	e78	e74	e260	1490	950	1040	772
7	e540	e130	e120	e92	e84	e78	e74	e260	1530	1740	939	778
8	e520	e130	e120	e92	e84	e78	e74	e270	2260	1660	850	772
9	e500	e130	e120	e92	e84	e78	e74	e280	1380	1310	787	757
10	e450	e140	e120	e92	e84	e78	e76	e290	1070	981	740	724
11	e410	e140	e120	e92	e82	e78	e76	e310	967	785	715	691
12	e390	e140	e110	e92	e82	e78	e76	e320	943	665	812	664
13	e380	e150	e110	e90	e82	e78	e78	354	899	590	922	639
14	e360	e150	e110	e90	e82	e76	e78	424	740	658	860	607
15	e340	e150	e110	e90	e82	e76	e80	602	818	894	811	575
16	e320	e150	e110	e90	e82	e76	e82	717	772	755	779	555
17	e310	e150	e110	e90	e82	e76	e84	721	630	633	762	541
18	e290	e150	e110	e90	e82	e76	e86	781	578	561	744	524
19	e280	e150	e100	e90	e80	e76	e90	816	570	511	724	507
20	e270	e150	e100	e90	e80	e76	e96	906	542	477	701	492
21	e260	e150	e100	e90	e80	e76	e105	1030	489	461	663	483
22	e250	e150	e100	e90	e80	e74	e120	1130	450	506	634	470
23	e240	e140	e100	e88	e80	e74	e140	1440	432	524	623	460
24	e230	e140	e100	e88	e80	e74	e150	1450	400	837	633	443
25	e230	e140	e98	e88	e80	e74	e170	1020	362	1580	687	431
26	e220	e140	e98	e88	e80	e74	e200	836	332	1480	737	418
27	e210	e130	e98	e88	e80	e74	e230	848	671	1220	707	404
28	e200	e130	e98	e88	e80	e74	e260	1120	643	1490	665	388
29	e190	e130	e98	e88	---	e74	e290	821	655	2170	623	373
30	e180	e130	e96	e86	---	e74	e300	590	782	3600	595	372
31	e170	---	e96	e86	---	e74	---	667	---	3260	588	---
TOTAL	11582	4280	3392	2808	2302	2368	3533	19683	25787	33840	28001	17425
MEAN	374	143	109	90.6	82.2	76.4	118	635	860	1092	903	581
MAX	844	160	130	96	86	80	300	1450	2260	3600	2730	834
MIN	170	130	96	86	80	74	74	260	332	461	588	372
AC-FT	22970	8490	6730	5570	4570	4700	7010	39040	51150	67120	55540	34560
CFSM	.55	.21	.16	.13	.12	.11	.17	.94	1.27	1.61	1.33	.86
IN.	.64	.24	.19	.15	.13	.13	.19	1.08	1.42	1.86	1.54	.96

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2001, BY WATER YEAR (WY) #

	MEAN	218	105	77.3	54.9	42.8	39.6	109	830	991	735	983	596
MAX	374	143	109	90.6	82.2	76.4	155	1262	1993	1092	1651	985	
(WY)	2001	2001	2001	2001	2001	2001	2001	1998	2000	2000	2001	2000	2000
MIN	149	90.1	57.5	28.9	13.6	10.5	73.1	635	468	419	590	421	
(WY)	2000	1999	1999	1999	1999	1999	1999	2000	2001	1998	1999	1999	1999

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1997 - 2001 #
ANNUAL TOTAL	227564	155001	
ANNUAL MEAN	622	425	406
HIGHEST ANNUAL MEAN			595
LOWEST ANNUAL MEAN			272
HIGHEST DAILY MEAN	7500	Aug 14	3600 Jul 30
LOWEST DAILY MEAN	a29	Feb 18	b74 Mar 22
ANNUAL SEVEN-DAY MINIMUM	29	Feb 18	74 Mar 22
MAXIMUM PEAK FLOW		4120	Jul 30
MAXIMUM PEAK STAGE		15.86	Jul 30
ANNUAL RUNOFF (AC-FT)	451400	307400	294400
ANNUAL RUNOFF (CFSM)	.92	.63	.60
ANNUAL RUNOFF (INCHES)	12.50	8.52	8.16
10 PERCENT EXCEEDS	1630	929	981
50 PERCENT EXCEEDS	195	220	180
90 PERCENT EXCEEDS	31	78	33

See Period of Record; partial years used in monthly statistics

a From Feb. 18 to Mar. 1

b From Mar. 22 to Apr. 9

c From Mar 8 to 24, 1999

e Estimated

15477761 UPPER WEST CREEK NEAR BIG DELTA

LOCATION.--Lat 64°25'01", long 144°50'55", in SW¹/₄ sec.6, T.6 S., R.15 E., (Big Delta B-2 quad), Hydrologic Unit 19040503, on right bank, 5.1 mi upstream from mouth, 3.4 mi southeast of Pogo Mine Camp site, and 31 mi northeast of Big Delta.

DRAINAGE AREA.--1.64 mi².

PERIOD OF RECORD.--October 1999 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,900 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	e1.6	e.98	e.52	e.38	e.28	e.24	.44	.38	.72	1.6	1.2
2	2.2	e1.6	e.96	e.50	e.36	e.28	e.24	.36	.37	.76	1.4	1.3
3	2.2	e1.6	e.92	e.50	e.36	e.28	e.24	.35	.37	.75	1.4	1.2
4	2.2	e1.5	e.90	e.50	e.36	e.28	e.24	.33	.42	.74	1.3	1.2
5	e2.1	e1.5	e.86	e.48	e.34	e.28	e.24	.35	.52	.75	1.3	1.2
6	e2.1	e1.5	e.84	e.48	e.34	e.28	e.24	.38	.47	.82	1.4	1.2
7	e2.1	e1.5	e.82	e.48	e.34	e.28	e.24	.36	.50	1.0	1.4	1.1
8	e2.1	e1.4	e.80	e.48	e.34	e.28	e.24	.43	.61	1.2	1.5	1.1
9	e2.0	e1.4	e.78	e.46	e.34	e.28	e.24	.45	.52	1.0	1.5	1.1
10	e2.0	e1.4	e.76	e.46	e.32	e.28	e.24	.42	.49	.91	1.5	1.1
11	e1.9	e1.4	e.74	e.46	e.32	e.28	e.24	.39	.49	.89	1.5	1.1
12	e1.9	e1.4	e.72	e.46	e.32	e.26	e.24	.42	.50	.87	1.5	1.1
13	e1.9	e1.4	e.72	e.44	e.32	e.26	e.24	.48	.51	.87	1.5	1.1
14	e1.9	e1.4	e.70	e.44	e.32	e.26	e.24	.48	.72	.87	1.5	1.0
15	e1.9	e1.4	e.68	e.44	e.32	e.26	e.26	.47	.73	.87	1.5	1.0
16	e1.9	e1.3	e.66	e.44	e.32	e.26	e.26	.56	.61	.84	1.5	.99
17	e1.9	e1.3	e.66	e.44	e.30	e.26	e.26	.50	.57	.83	1.5	.96
18	e1.9	e1.3	e.64	e.42	e.30	e.26	e.26	.45	.56	.83	1.4	.96
19	e1.9	e1.3	e.62	e.42	e.30	e.26	e.26	.53	.56	.83	1.4	.95
20	e1.9	e1.3	e.62	e.42	e.30	e.26	e.26	.56	.57	.86	1.4	.94
21	e1.9	e1.3	e.60	e.42	e.30	e.26	e.28	.84	.56	.88	1.4	.92
22	e1.8	e1.2	e.60	e.42	e.30	e.26	e.28	.81	.58	.89	1.4	.91
23	e1.8	e1.2	e.58	e.42	e.30	e.26	e.30	1.2	.59	.92	1.4	.91
24	e1.8	e1.2	e.58	e.42	e.30	e.24	e.32	.77	.60	1.2	1.3	.90
25	e1.8	e1.1	e.56	e.40	e.28	e.24	e.36	.59	.60	1.1	1.4	.88
26	e1.7	e1.1	e.56	e.40	e.28	e.24	e.40	.48	.62	1.1	1.3	.87
27	e1.7	e1.1	e.54	e.40	e.28	e.24	.54	.42	.68	1.2	1.3	.87
28	e1.7	e1.1	e.54	e.40	e.28	e.24	.52	e.42	.68	1.2	1.3	.86
29	e1.7	e1.0	e.54	e.40	---	e.24	.55	e.40	.68	1.6	1.3	.85
30	e1.7	e1.0	e.52	e.38	---	e.24	.53	e.40	.71	1.6	1.3	.83
31	e1.7	---	e.52	e.38	---	e.24	---	e.38	---	1.6	1.2	---
TOTAL	59.6	39.8	21.52	13.68	8.92	8.12	9.00	15.42	16.77	30.50	43.6	30.60
MEAN	1.92	1.33	.69	.44	.32	.26	.30	.50	.56	.98	1.41	1.02
MAX	2.3	1.6	.98	.52	.38	.28	.55	1.2	.73	1.6	1.6	1.3
MIN	1.7	1.0	.52	.38	.28	.24	.24	.33	.37	.72	1.2	.83
MED	1.9	1.3	.66	.44	.32	.26	.26	.44	.56	.88	1.4	1.0
AC-FT	118	79	43	27	18	16	18	31	33	60	86	61
CFSM	1.17	.81	.42	.27	.19	.16	.18	.30	.34	.60	.86	.62
IN.	1.35	.90	.49	.31	.20	.18	.20	.35	.38	.69	.99	.69

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2001, BY WATER YEAR (WY)

	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
MEAN	1.24	.87	.52	.36	.28	.25	.28	.75	1.11	1.22	2.12	2.04
MAX	1.92	1.33	.69	.44	.32	.26	.30	1.00	1.67	1.45	2.83	3.06
(WY)	2001	2001	2001	2001	2001	2001	2001	2000	2000	2000	2000	2000
MIN	.55	.41	.34	.28	.25	.23	.25	.50	.56	.98	1.41	1.02
(WY)	2000	2000	2000	2000	2000	2000	2000	2001	2001	2001	2001	2001

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 2000 - 2001

ANNUAL TOTAL	457.32	297.53		
ANNUAL MEAN	1.25	.82		
HIGHEST ANNUAL MEAN			.92	
LOWEST ANNUAL MEAN			1.03	2000
HIGHEST DAILY MEAN	4.6	Aug 30	.82	2001
LOWEST DAILY MEAN	a.23	Mar 4	4.6	Aug 30 2000
ANNUAL SEVEN-DAY MINIMUM	.23	Mar 4	a.23	Mar 4 2000
MAXIMUM PEAK FLOW			.23	Mar 4 2000
MAXIMUM PEAK STAGE			c1.8	Jul 29
MAXIMUM PEAK STAGE			c20.57	Jul 29
ANNUAL RUNOFF (AC-FT)	907	590	5.0	Aug 30 2000
ANNUAL RUNOFF (CFSM)	.76	.50	c20.69	Oct 1
ANNUAL RUNOFF (INCHES)	10.37	6.75	20.98	Aug 30 2000
10 PERCENT EXCEEDS	2.7	1.6	20.98	Aug 30 2000
50 PERCENT EXCEEDS	1.2	.62		
90 PERCENT EXCEEDS	.23	.26		

a From Mar. 4 to Apr. 9

b From Mar. 24 to Apr. 14

c Maximum discharge 2.3 ft³/s, Oct.1, gage height 20.69 ft, occurred on falling stage following peak of Aug. 30, 2000; maximum independent peak discharge, 1.8 ft³/s, gage height 20.57 ft, Jul. 29

e Estimated

15477768 SONORA CREEK ABOVE TRIBUTARY NEAR BIG DELTA

LOCATION.--Lat 64°23'22", long 144°46'40", in SW¹/₄ sec.16, T.6 S., R.15 E. (Big Delta B-2 quad), Hydrologic Unit 19040503, on right bank, 2.5 miles upstream from mouth, 6.3 miles southeast of Pogo Mine Camp site, and 35 miles northeast of Big Delta.

DRAINAGE AREA.--6.05 mi².

PERIOD OF RECORD.--May, 2000 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1650 ft above sea level, from topographic map.

EXTREMES FOR CURRENT YEAR.--

Water year 2000--Maximum discharge for period May through September, 34 ft³/s, May 22, 2000 gage height 21.17 ft; minimum not determined, occurs during winter; minimum observed outside period of record, 0.58 ft³/s March 21, 2000 result of discharge measurement.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	e3.2	9.7	2.0	e2.4	10
2	---	---	---	---	---	---	---	e4.0	8.2	2.0	e2.3	11
3	---	---	---	---	---	---	---	e5.2	9.3	2.4	e2.3	11
4	---	---	---	---	---	---	---	e6.8	8.6	2.5	e2.2	10
5	---	---	---	---	---	---	---	e5.0	6.7	2.4	e2.2	9.6
6	---	---	---	---	---	---	---	e3.4	5.5	2.4	e2.2	9.5
7	---	---	---	---	---	---	---	e6.0	4.8	2.2	e2.3	9.3
8	---	---	---	---	---	---	---	e9.0	4.0	2.1	e2.3	9.5
9	---	---	---	---	---	---	---	e7.0	3.7	2.1	e2.4	9.2
10	---	---	---	---	---	---	---	e5.0	3.8	2.4	e2.6	9.2
11	---	---	---	---	---	---	---	e3.7	3.6	3.8	e3.8	9.6
12	---	---	---	---	---	---	---	e2.8	3.1	3.4	e9.0	9.6
13	---	---	---	---	---	---	---	3.8	2.8	2.8	e22	9.5
14	---	---	---	---	---	---	---	3.7	2.5	2.5	e16	9.5
15	---	---	---	---	---	---	---	3.4	2.4	2.4	e12	9.8
16	---	---	---	---	---	---	---	4.1	2.5	2.3	9.6	9.6
17	---	---	---	---	---	---	---	5.5	2.4	2.4	8.1	9.5
18	---	---	---	---	---	---	---	8.3	2.5	2.4	8.8	9.3
19	---	---	---	---	---	---	---	9.1	3.0	2.8	11	9.1
20	---	---	---	---	---	---	---	16	2.6	3.3	9.7	8.9
21	---	---	---	---	---	‡0.6	---	17	2.4	e2.9	8.8	8.8
22	---	---	---	---	---	---	---	21	3.6	e2.6	9.8	8.9
23	---	---	---	---	---	---	---	17	3.9	e2.8	9.9	8.9
24	---	---	---	---	---	---	---	27	2.9	e3.0	9.1	8.7
25	---	---	---	---	---	---	---	21	2.5	e2.8	9.9	9.1
26	---	---	---	‡0.7	---	---	---	14	2.4	e2.7	12	10
27	---	---	---	---	---	---	---	10	2.4	e2.6	10	9.5
28	---	---	---	---	---	---	---	7.6	2.4	e2.7	9.2	9.0
29	---	---	---	---	---	---	---	8.1	2.3	e2.5	8.8	8.6
30	---	---	---	---	---	---	---	9.1	2.1	e2.5	11	8.4
31	---	---	---	---	---	---	---	10	---	e2.4	11	---
TOTAL	---	---	---	---	---	---	---	276.8	118.6	80.1	242.7	282.6
MEAN	---	---	---	---	---	---	---	8.93	3.95	2.58	7.83	9.42
MAX	---	---	---	---	---	---	---	27	9.7	3.8	22	11
MIN	---	---	---	---	---	---	---	2.8	2.1	2.0	2.2	8.4
MED	---	---	---	---	---	---	---	7.0	3.0	2.5	9.0	9.5
AC-FT	---	---	---	---	---	---	---	549	235	159	481	561
CFSM	---	---	---	---	---	---	---	1.48	.65	.43	1.29	1.56
IN.	---	---	---	---	---	---	---	1.70	.73	.49	1.49	1.74

‡ Result of discharge measurement
e Estimated

15477768 SONORA CREEK ABOVE TRIBUTARY NEAR BIG DELTA--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	e5.2	3.2	2.3	1.7	1.6	1.4	3.5	2.6	e4.2	7.7	4.3
2	7.1	4.6	3.2	2.3	1.7	1.6	1.4	2.8	2.5	e4.0	6.3	4.6
3	e6.6	4.6	3.0	2.3	1.7	1.6	1.3	2.5	2.4	e3.4	5.8	4.7
4	e6.4	4.6	2.9	2.2	1.8	1.6	1.3	2.4	2.8	e3.0	5.4	4.6
5	e6.4	4.4	2.9	2.2	1.7	1.6	1.3	2.3	5.0	e3.0	5.1	e4.4
6	e6.2	4.2	3.0	2.2	1.7	1.5	1.4	2.8	3.6	e3.6	4.9	e4.1
7	e6.2	4.1	3.1	2.1	1.7	1.5	1.4	2.5	3.5	e6.6	4.7	e4.1
8	e6.0	4.1	3.1	2.1	1.7	1.5	1.4	2.5	5.1	e8.2	4.5	e4.0
9	e6.0	4.1	3.2	2.1	1.7	1.5	1.4	3.1	3.8	e5.8	4.4	e3.9
10	e5.8	4.1	3.1	2.1	1.7	1.5	1.4	3.1	3.2	e4.6	4.4	e3.8
11	e5.6	4.1	2.9	2.1	1.6	1.5	1.4	3.1	2.8	e4.2	4.5	e3.8
12	e5.4	4.0	2.8	2.0	1.6	1.5	1.4	3.4	2.6	e4.0	4.8	e3.7
13	e5.4	4.0	2.7	2.0	1.7	1.5	1.4	4.0	2.6	e3.8	4.7	e3.6
14	e5.6	3.9	2.7	2.0	1.7	1.5	1.4	4.3	2.8	e3.4	4.7	e3.6
15	e5.8	3.9	2.7	1.9	1.7	1.5	1.4	5.0	3.3	e3.2	4.6	e3.6
16	e6.0	3.9	2.5	2.0	1.7	1.5	1.4	5.1	2.8	e3.0	4.7	e3.6
17	e6.2	3.8	2.4	2.0	1.7	1.5	1.4	4.8	2.5	e2.9	4.6	e3.5
18	e6.4	3.7	2.4	2.0	1.7	1.6	1.4	5.0	2.4	e2.8	4.5	e3.5
19	e6.4	3.7	2.4	2.0	1.7	1.5	1.4	5.6	2.3	e2.7	4.5	e3.5
20	e6.2	3.7	2.4	2.1	1.7	1.5	1.4	6.8	2.2	e2.8	4.4	e3.5
21	e6.2	3.6	2.5	2.0	1.6	1.5	1.7	7.5	2.2	e2.8	4.4	e3.4
22	e6.2	3.6	2.5	2.0	1.6	1.5	2.7	7.3	2.1	e2.8	4.3	e3.4
23	e6.0	3.6	2.4	2.0	1.6	1.5	3.3	12	2.1	e3.4	4.5	e3.3
24	e6.0	3.5	2.3	2.0	1.7	1.4	3.1	8.0	2.0	e6.2	4.8	e3.3
25	e5.8	3.5	2.2	1.9	1.7	1.4	3.2	5.0	e1.9	5.6	4.7	e3.2
26	e5.8	3.4	2.1	1.9	1.6	1.4	3.7	3.9	e1.9	5.1	4.6	3.1
27	e5.6	3.3	2.2	1.9	1.6	1.4	3.9	3.6	e2.4	5.8	4.5	3.1
28	e5.6	3.2	2.2	1.8	1.6	1.3	3.7	3.2	e2.8	6.2	4.5	3.0
29	e5.4	3.2	2.2	1.8	---	1.4	4.0	2.8	e3.0	7.8	4.4	3.0
30	e5.4	3.2	2.1	1.8	---	1.4	3.9	2.7	e4.0	8.9	4.4	3.1
31	e5.2	---	2.2	1.8	---	1.3	---	2.7	---	8.2	4.3	---
TOTAL	186.8	116.8	81.5	62.9	46.9	46.1	60.9	133.3	85.2	142.0	148.6	110.3
MEAN	6.03	3.89	2.63	2.03	1.68	1.49	2.03	6.61	3.40	3.58	6.31	6.55
MAX	7.9	5.2	3.2	2.3	1.8	1.6	4.0	8.93	3.95	4.58	7.83	9.42
MIN	5.2	3.2	2.1	1.8	1.6	1.3	1.3	2.3	1.9	2.7	4.3	3.0
MED	6.0	3.9	2.5	2.0	1.7	1.5	1.4	3.5	2.6	4.0	4.6	3.6
AC-FT	371	232	162	125	93	91	121	264	169	282	295	219
CFSM	1.00	.64	.43	.34	.28	.25	.34	.71	.47	.76	.79	.61
IN.	1.15	.72	.50	.39	.29	.28	.37	.82	.52	.87	.91	.68

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2001, BY WATER YEAR (WY)#

	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
MEAN	6.03	3.89	2.63	2.03	1.68	1.49	2.03	6.61	3.40	3.58	6.31	6.55
MAX	6.03	3.89	2.63	2.03	1.68	1.49	2.03	8.93	3.95	4.58	7.83	9.42
(WY)	2001	2001	2001	2001	2001	2001	2001	2000	2000	2001	2000	2000
MIN	6.03	3.89	2.63	2.03	1.68	1.49	2.03	4.30	2.84	2.58	4.79	3.68
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2000	2001	2001

SUMMARY STATISTICS

FOR 2001 WATER YEAR

WATER YEARS 2000 - 2001#

ANNUAL TOTAL	1221.3		
ANNUAL MEAN	3.35	3.35	
HIGHEST ANNUAL MEAN		3.35	2001
LOWEST ANNUAL MEAN		3.35	2001
HIGHEST DAILY MEAN	12	May 23	27
LOWEST DAILY MEAN	a1.3	Mar 28	a1.3
ANNUAL SEVEN-DAY MINIMUM	1.3	Mar 30	1.3
MAXIMUM PEAK FLOW	14	May 23	34
MAXIMUM PEAK STAGE	20.47	May 23	21.17
INSTANTANEOUS LOW FLOW	b1.3	Mar 25	c0.58
ANNUAL RUNOFF (AC-FT)	2420		2420
ANNUAL RUNOFF (CFSM)	.55		.55
ANNUAL RUNOFF (INCHES)	7.51		7.51
10 PERCENT EXCEEDS	5.8		9.0
50 PERCENT EXCEEDS	3.1		3.3
90 PERCENT EXCEEDS	1.5		1.6

See Period of Record; partial years used in monthly statistics

a Mar. 28, 31, and Apr. 3-5

b Mar. 25 to Apr. 11

c Minimum observed outside period of record, result of discharge measurement

e Estimated

15477770 SONORA CREEK NEAR BIG DELTA

LOCATION.--Lat 64°22'40", long 144°48'41", in SE¹/₄ sec.20, T.6 S., R.15 E. (Big Delta B-2 quad), Hydrologic Unit 19040503, on left bank, 1.2 mi upstream from mouth, 6.5 mi southeast of Pogo Mine Camp site, and 34 mi northeast of Big Delta.

DRAINAGE AREA.--10.5 mi².

PERIOD OF RECORD.--August 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1450 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

REVISED RECORDS.--WDR AK-00-1: 1998 (M).

REVISIONS.-- The estimated maximum discharge for the water year 2000 has been revised to 61 ft³/s, May 22, 2000, gage height undetermined. Revised daily discharges, in cubic feet per second, for the period May 20 to 26, 2000 are given below. These figures supersede those published in reports for 2000.

Daily Discharges

	May 20...e29	May 21...e31	May 22...e38	May 23...e31	May 24...e49	May 25...e38	May 26...e25
MONTH							
May 2000		507.9	16.4	49	4.9	1010	1.80
Wtr year 2000		1043.8	5.91	49	.60	4290	7.66

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e13	e6.2	e2.9	e1.9	e1.5	e1.4	e1.2	e5.2	3.6	5.4	13	6.6
2	e11	e6.0	e2.9	e1.9	e1.5	e1.4	e1.2	e4.4	3.2	4.9	10	7.3
3	e11	e5.8	e2.8	e1.9	e1.5	e1.4	e1.2	e3.8	3.1	4.2	9.1	7.5
4	e10	e5.6	e2.8	e1.9	e1.5	e1.4	e1.2	e3.6	3.6	3.9	8.4	7.2
5	e10	e5.4	e2.7	e1.9	e1.5	e1.4	e1.2	e3.4	8.1	3.9	8.1	7.0
6	e9.8	e5.4	e2.7	e1.8	e1.5	e1.3	e1.2	e3.6	5.6	4.7	7.6	6.9
7	e9.6	e5.2	e2.7	e1.8	e1.5	e1.3	e1.2	e3.8	5.5	7.8	7.2	7.0
8	e9.6	e5.0	e2.6	e1.8	e1.5	e1.3	e1.2	e4.0	9.4	13	6.9	7.0
9	e9.4	e4.9	e2.6	e1.8	e1.5	e1.3	e1.2	e4.3	6.4	9.2	6.8	6.9
10	e9.2	e4.7	e2.5	e1.8	e1.5	e1.3	e1.2	e4.8	4.8	7.1	6.7	6.7
11	e9.0	e4.6	e2.5	e1.8	e1.5	e1.3	e1.2	e5.4	4.0	6.0	6.9	6.7
12	e8.8	e4.5	e2.5	e1.7	e1.5	e1.3	e1.2	e6.0	3.6	5.4	7.6	6.6
13	e8.6	e4.4	e2.4	e1.7	e1.4	e1.3	e1.2	e6.8	3.5	5.3	7.2	6.3
14	e8.6	e4.2	e2.4	e1.7	e1.4	e1.3	e1.3	8.3	3.8	5.2	7.2	6.1
15	e8.8	e4.1	e2.4	e1.7	e1.4	e1.3	e1.3	9.3	4.8	4.9	7.0	6.0
16	e9.0	e4.0	e2.3	e1.7	e1.4	e1.3	e1.3	9.2	3.8	4.7	7.2	6.0
17	e9.2	e3.9	e2.3	e1.7	e1.4	e1.3	e1.4	8.9	3.3	4.4	7.0	5.9
18	e9.4	e3.8	e2.3	e1.7	e1.4	e1.3	e1.5	8.9	3.0	4.3	6.9	5.7
19	e9.2	e3.7	e2.2	e1.6	e1.4	e1.3	e1.6	10	2.9	4.2	6.8	5.7
20	e9.0	e3.7	e2.2	e1.6	e1.4	e1.3	e1.9	13	2.8	4.5	6.6	5.7
21	e8.8	e3.6	e2.2	e1.6	e1.4	e1.3	e2.4	14	2.7	4.5	6.5	5.6
22	e8.6	e3.5	e2.2	e1.6	e1.4	e1.3	e3.0	14	2.6	4.4	6.6	5.6
23	e8.2	e3.4	e2.1	e1.6	e1.4	e1.3	e3.6	22	2.5	4.9	7.2	5.5
24	e8.0	e3.4	e2.1	e1.6	e1.4	e1.3	e4.6	15	2.5	8.1	8.1	5.4
25	e7.8	e3.3	e2.1	e1.6	e1.4	e1.2	e5.8	9.0	2.4	8.5	7.8	5.3
26	e7.6	e3.2	e2.1	e1.6	e1.4	e1.2	e6.2	6.4	2.4	7.6	7.6	5.1
27	e7.2	e3.1	e2.0	e1.6	e1.4	e1.2	e6.4	5.5	3.3	8.9	7.3	5.0
28	e7.0	e3.1	e2.0	e1.6	e1.4	e1.2	e6.6	4.9	3.7	9.8	7.1	4.9
29	e6.8	e3.0	e2.0	e1.6	---	e1.2	e6.6	4.1	3.8	13	6.8	5.0
30	e6.6	e3.0	e2.0	e1.5	---	e1.2	e6.4	4.0	5.1	15	6.7	5.0
31	e6.4	---	e2.0	e1.5	---	e1.2	---	3.9	---	14	6.7	---
TOTAL	275.2	127.7	73.5	52.8	40.4	40.1	77.5	229.5	119.8	211.7	232.6	183.2
MEAN	8.88	4.26	2.37	1.70	1.44	1.29	2.58	7.40	3.99	6.83	7.50	6.11
MAX	13	6.2	2.9	1.9	1.5	1.4	6.6	22	9.4	15	13	7.5
MIN	6.4	3.0	2.0	1.5	1.4	1.2	1.2	3.4	2.4	3.9	6.5	4.9
AC-FT	546	253	146	105	80	80	154	455	238	420	461	363
CFSM	.85	.41	.23	.16	.14	.12	.25	.71	.38	.65	.71	.58
IN.	.97	.45	.26	.19	.14	.14	.27	.81	.42	.75	.82	.65

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2001, BY WATER YEAR (WY)#

	1997	1998	1999	2000	2001
MEAN	3.81	2.15	1.36	1.00	.82
MAX	8.88	4.26	2.37	1.70	1.44
(WY)	2001	2001	2001	2001	2001
MIN	1.63	1.31	.98	.71	.56
(WY)	2000	2000	1998	1998	1998

See Period of Record; partial years used in monthly statistics
e Estimated

15477770 SONORA CREEK NEAR BIG DELTA--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1997 - 2001#
ANNUAL TOTAL	2516.80	1664.0	
ANNUAL MEAN	6.88	4.56	3.88
HIGHEST ANNUAL MEAN			5.91 2000
LOWEST ANNUAL MEAN			2.07 1998
HIGHEST DAILY MEAN	49 May 24	22 May 23	e49 May 24 2000
LOWEST DAILY MEAN	a.60 Feb 15	b1.2 Mar 25	.40 Mar 7 1998
ANNUAL SEVEN-DAY MINIMUM	.60 Feb 15	1.2 Mar 25	.40 Mar 7 1998
INSTANTANEOUS PEAK FLOW		26 May 23	e61 May 22 2000
INSTANTANEOUS PEAK STAGE		29.05 May 23	c
INSTANTANEOUS PEAK STAGE		d30.04 Apr 21	de33.4 May 12 2000
ANNUAL RUNOFF (AC-FT)	4990	3300	2810
ANNUAL RUNOFF (CFSM)	.65	.43	.37
ANNUAL RUNOFF (INCHES)	8.92	5.90	5.01
10 PERCENT EXCEEDS	19	8.9	8.4
50 PERCENT EXCEEDS	4.3	3.8	2.2
90 PERCENT EXCEEDS	.60	1.3	.60

See Period of Record; partial years used in monthly statistics

a From Feb. 15 to Apr. 14

b From Mar. 25 to Apr. 13

c Not determined

d Backwater from snow and ice

e Estimated

15477790 CENTRAL CREEK NEAR BIG DELTA

LOCATION.--Lat 64°22'37", long 144°56'35", in SE¹/₄ sec. 22, T. 6 S., R. 14 E. (Big Delta B-2 quad), Hydrologic Unit 19040503, on right bank, 0.5 mi upstream from mouth, 5 mi south of Pogo Mine Camp site, and 31 mi northeast of Big Delta.

DRAINAGE AREA.--115 mi².

PERIOD OF RECORD.--August 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1250 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e90	e36	e23	e12	e9.6	e7.8	e6.4	36	e82	174	282	66
2	e68	e36	e22	e12	e9.6	e7.8	e6.2	32	e84	143	187	66
3	e66	e35	e22	e12	e9.6	e7.8	e6.2	29	85	143	145	82
4	e64	e34	e21	e12	e9.4	e7.6	e6.2	25	81	85	126	82
5	e62	e33	e21	e12	e9.4	e7.6	e6.2	23	172	68	117	77
6	e62	e32	e20	e12	e9.4	e7.6	e6.2	27	148	106	105	76
7	e60	e31	e20	e12	e9.2	e7.6	e6.2	27	139	204	93	77
8	e58	e31	e19	e12	e9.2	e7.4	e6.2	28	262	298	84	82
9	e52	e31	e19	e12	e9.2	e7.4	e6.2	33	163	216	77	85
10	e48	e31	e18	e12	e9.0	e7.4	e6.2	36	104	134	73	80
11	e44	e32	e18	e12	e9.0	e7.4	e6.4	33	75	95	70	75
12	e40	e32	e18	e12	e8.8	e7.4	e6.4	34	62	73	80	71
13	e38	e32	e17	e12	e8.8	e7.2	e6.6	47	56	61	85	67
14	e38	e33	e17	e12	e8.8	e7.2	e6.6	61	78	59	82	63
15	e40	e33	e17	e12	e8.6	e7.2	e6.8	85	116	82	77	61
16	e42	e33	e16	e11	e8.6	e7.2	e6.8	99	79	68	76	59
17	e42	e32	e16	e11	e8.6	e7.0	e7.0	104	56	54	74	57
18	e40	e32	e16	e11	e8.4	e7.0	e7.0	114	44	48	72	55
19	e39	e32	e15	e11	e8.4	e7.0	e7.2	124	38	43	68	54
20	e38	e31	e15	e11	e8.4	e7.0	e7.4	155	34	39	63	52
21	e38	e31	e15	e11	e8.2	e6.8	e7.8	190	30	40	60	52
22	e37	e30	e14	e11	e8.2	e6.8	e8.6	228	27	44	59	50
23	e37	e30	e14	e11	e8.2	e6.8	e11	348	25	47	59	49
24	e36	e29	e14	e11	e8.2	e6.6	e19	311	23	92	102	47
25	e36	e28	e13	e11	e8.0	e6.6	e26	193	21	141	103	46
26	e37	e27	e13	e10	e8.0	e6.6	30	142	21	127	105	45
27	e38	e26	e13	e10	e8.0	e6.6	32	131	145	120	98	43
28	e38	e25	e13	e10	e8.0	e6.4	34	152	184	151	91	41
29	e36	e24	e13	e10	---	e6.4	37	106	111	307	79	40
30	e36	e24	e13	e9.8	---	e6.4	37	80	184	382	73	41
31	e37	---	e13	e9.8	---	e6.4	---	81	---	310	70	---
TOTAL	1437	926	518	349.6	244.8	220.0	372.8	3114	2729	3954	2935	1841
MEAN	46.4	30.9	16.7	11.3	8.74	7.10	12.4	100	91.0	128	94.7	61.4
MAX	90	36	23	12	9.6	7.8	37	348	262	382	282	85
MIN	36	24	13	9.8	8.0	6.4	23	23	21	39	59	40
AC-FT	2850	1840	1030	693	486	436	739	6180	5410	7840	5820	3650
CFSM	.40	.27	.15	.10	.08	.06	.11	.87	.79	1.11	.82	.53
IN.	.46	.30	.17	.11	.08	.07	.12	1.01	.88	1.28	.95	.60

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2001, BY WATER YEAR (WY)#

	MEAN	24.0	11.6	5.42	3.30	2.41	1.98	10.1	138	88.6	73.0	114	73.2
MAX	46.4	30.9	16.7	11.3	8.74	7.10	12.4	241	170	128	237	170	
(WY)	2001	2001	2001	2001	2001	2001	2001	2000	2000	2001	2000	2000	
MIN	13.8	4.71	.75	.026	.000	.000	4.82	81.6	26.3	47.8	70.1	37.2	
(WY)	2000	1999	1999	1999	1999	1999	2000	1998	1998	1999	1998	1999	

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR			FOR 2001 WATER YEAR			WATER YEARS 1997 - 2001#		
ANNUAL TOTAL	29838.20			18641.2					
ANNUAL MEAN	81.5			51.1			46.5		
HIGHEST ANNUAL MEAN							75.5		
LOWEST ANNUAL MEAN							26.8		
HIGHEST DAILY MEAN	918			382			918		
LOWEST DAILY MEAN	a.00			b6.2			c.00		
ANNUAL SEVEN-DAY MINIMUM	.00			6.2			.00		
MAXIMUM PEAK FLOW				535			d1340		
MAXIMUM PEAK STAGE				44.53			45.43		
ANNUAL RUNOFF (AC-FT)	59180			36970			33690		
ANNUAL RUNOFF (CFSM)	.71			.44			.40		
ANNUAL RUNOFF (INCHES)	9.65			6.03			5.49		
10 PERCENT EXCEEDS	254			118			118		
50 PERCENT EXCEEDS	32			32			21		
90 PERCENT EXCEEDS	.00			7.2			.00		

See Period of Record; partial years used in monthly statistics

a From Feb. 18 to Apr. 19

b From Apr. 02 to Apr. 10

c No flow during winter months most years

d From rating extended above 395 ft³/s

e Estimated

15478040 PHELAN CREEK NEAR PAXSON

LOCATION.--Lat 63°14'27", Long 145°28'03", in SW¹/₄ sec. 28, T. 19 S., R. 12 E. (Mt.Hayes A-3 quad), Hydrologic Unit 19020102, on left bank about 1 mi downstream from terminus of Gulkana Glacier and 14.5 mi north of Paxson, Alaska.

DRAINAGE AREA.--12.2 mi².

PERIOD OF RECORD.--October 1966 to September 1978, annual maximums, water years 1984-85, October 1989 to current year. Water year 1994 not published, daily mean values of discharge are available from the computer files of the Alaska Science Center. Prior to October 1968, published as Gulkana Creek near Paxson.

GAGE.--Water-stage recorder. Datum of gage is 3,690.67 ft above sea level.

REMARKS.--Records fair except for the period July 20 to 31 and estimated daily discharges, which are poor. Large fluctuations from ice melt and alternate damming and storage release during melt season. Streamflow augmented by Gulkana Glacier and other glaciers that cover 7.5 mi² and 1.1 mi², respectively, of the drainage basin. A recording air temperature and precipitation gage at 4,860 ft above sea level, plus 3 snow and ice balance measurement sites, are located in the basin. Combined snow, ice, and water balances of the basin are published in other reports of the Geological Survey. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	10	5.9	4.5	3.3	2.6	2.2	2.7	72	264	338	101
2	22	10	5.8	4.5	3.1	2.5	2.2	2.6	66	276	277	100
3	21	9.8	5.9	4.4	3.0	2.4	2.2	2.5	56	244	250	87
4	20	9.8	5.9	4.3	3.0	2.4	2.2	2.4	65	226	238	67
5	20	9.6	6.0	4.3	3.1	2.5	2.1	2.5	78	253	210	53
6	20	9.5	5.9	4.3	3.1	2.5	2.2	2.5	100	206	210	35
7	19	9.4	5.8	4.3	3.0	2.5	2.2	2.4	104	181	203	31
8	17	9.3	5.8	4.2	2.8	2.5	2.2	2.6	88	166	196	27
9	17	8.7	5.7	4.1	2.8	2.5	2.2	2.6	90	150	191	27
10	16	8.6	5.8	3.9	2.8	2.5	2.2	2.6	101	162	198	30
11	16	8.5	5.7	4.0	2.8	2.5	2.2	2.6	119	152	190	30
12	15	8.1	5.5	4.1	2.8	2.5	2.2	2.9	152	143	191	28
13	15	8.1	5.3	3.9	2.9	2.5	2.2	3.3	120	154	213	27
14	14	8.0	5.4	3.9	e2.9	2.4	2.1	3.7	122	187	230	25
15	14	7.7	5.4	4.0	2.9	2.4	2.0	4.2	135	211	218	25
16	14	7.9	5.3	3.7	2.9	2.4	2.0	5.3	128	221	249	26
17	14	7.6	5.3	3.5	2.9	2.2	2.0	6.9	135	223	224	36
18	13	7.6	5.2	3.5	2.8	2.3	2.1	8.7	140	267	224	42
19	13	7.4	5.2	3.6	2.7	2.3	2.1	13	139	259	208	39
20	e13	7.4	5.1	3.5	2.7	2.3	2.2	e21	193	368	215	42
21	e13	7.3	5.1	3.5	2.7	2.3	2.2	e28	244	477	282	38
22	12	6.9	4.7	3.5	2.6	2.2	2.3	e23	222	616	269	27
23	12	6.9	4.9	3.5	2.6	2.2	2.4	e17	253	598	202	25
24	12	6.7	4.9	3.4	2.5	2.2	2.3	e14	252	573	198	23
25	12	6.6	4.7	3.3	2.6	2.2	2.4	13	225	505	185	21
26	12	6.3	4.8	3.4	2.8	2.2	2.5	14	319	477	159	20
27	e11	6.6	4.7	3.3	2.8	2.2	2.5	16	293	425	148	19
28	e11	6.5	4.7	3.3	2.6	2.2	2.5	23	302	371	155	19
29	e11	6.3	4.7	3.3	---	2.2	2.5	24	250	422	152	19
30	11	6.0	4.4	3.3	---	2.2	2.7	28	259	602	142	17
31	11	---	4.5	3.4	---	2.1	---	47	---	541	130	---
TOTAL	464	239.1	164.0	117.7	79.5	72.9	67.3	344.0	4822	9920	6495	1106
MEAN	15.0	7.97	5.29	3.80	2.84	2.35	2.24	11.1	161	320	210	36.9
MAX	23	10	6.0	4.5	3.3	2.6	2.7	47	319	616	338	101
MIN	11	6.0	4.4	3.3	2.5	2.1	2.0	2.4	56	143	130	17
AC-FT	920	474	325	233	158	145	133	682	9560	19680	12880	2190
CFSM	1.23	.65	.43	.31	.23	.19	.18	.91	13.2	26.2	17.2	3.02
IN.	1.41	.73	.50	.36	.24	.22	.21	1.05	14.70	30.25	19.80	3.37

e Estimated

15478040 PHELAN CREEK NEAR PAXSON--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2001, BY WATER YEAR (WY)#

MEAN	10.8	5.67	4.06	3.21	2.70	2.36	2.25	16.1	143	305	251	61.1
MAX	17.4	9.57	6.87	5.32	4.50	4.00	4.00	48.2	247	460	411	129
(WY)	1996	1996	1996	1996	1972	1971	1971	1995	1969	1976	1972	1995
MIN	5.55	2.50	2.00	1.48	1.00	1.00	1.00	2.39	72.9	181	73.6	14.3
(WY)	1999	1978	1978	1967	1967	1967	1967	1992	1975	1991	1992	1992

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1967 - 2001#	
ANNUAL TOTAL	20922.7		23891.5			
ANNUAL MEAN	57.2		65.5		67.9	
HIGHEST ANNUAL MEAN					91.6	
LOWEST ANNUAL MEAN					43.0	
HIGHEST DAILY MEAN	570	Jul 17	616	Jul 22	1330	Aug 13 1997
LOWEST DAILY MEAN	a2.8	Apr 12	b2.0	Apr 15	c1.0	Jan 16 1967
ANNUAL SEVEN-DAY MINIMUM	2.8	Apr 12	2.1	Apr 13	1.0	Jan 16 1967
MAXIMUM PEAK FLOW			897	Jul 22	2320	Aug 13 1967
MAXIMUM PEAK STAGE			9.32	Jul 22	11.51	Aug 13 1967
MAXIMUM PEAK STAGE			d10.78	May 21	df14.70	Jun 1 1967
ANNUAL RUNOFF (AC-FT)	41500		47390		49180	
ANNUAL RUNOFF (CFSM)	4.69		5.37		5.56	
ANNUAL RUNOFF (INCHES)	63.80		72.85		75.60	
10 PERCENT EXCEEDS	223		224		250	
50 PERCENT EXCEEDS	7.6		7.7		6.0	
90 PERCENT EXCEEDS	3.0		2.3		2.0	

See Period of Record

a From Apr. 12 to Apr. 28

b From Apr. 15 to Apr. 17

c For many days in the winter and spring during water years 1967, 1969, 1978, and 1991

d Backwater from snow and ice

e Estimated

f Occurred in early Jun. as a result of flow over ice

15484000 SALCHA RIVER NEAR SALCHAKET

LOCATION.--Lat 64°28'22", long 146°55'26", in NE¹/₄ sec. 22, T. 5 S., R. 4 E. (Big Delta B-6 quad), Fairbanks North Star Borough, Hydrologic Unit 19040505, on right bank 0.2 mi upstream from bridge on Richardson Highway, 0.5 mi east of Sno-Shu Inn, 2 mi upstream from mouth, and 6 mi southeast of Salchaket.

DRAINAGE AREA.--2,170 mi², approximately.

PERIOD OF RECORD.--July 1909 to August 1910, published as "at mouth" (no winter records), October 1948 to current year.

GAGE.--Water-stage recorder. Datum of gage is 631.85 ft above sea level. Prior to August 10, 1910, nonrecording gage at site 1.5 mi downstream at different datum. October 1, 1948, to April 24, 1953, nonrecording gage, and April 25, 1953 to October 16, 1967, water-stage recorder at site 800 ft downstream at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3630	e920	e680	e440	e370	e320	e270	e1100	2540	1470	8730	2130
2	3140	e880	e660	e440	e370	e320	e270	e1100	2820	2130	6600	2100
3	2880	e840	e660	e430	e360	e320	e270	e1050	3240	2350	5320	2120
4	2560	e820	e660	e430	e360	e320	e270	e1000	3650	2290	4800	2190
5	2440	e780	e640	e420	e360	e320	e270	e1000	3310	1990	4630	2160
6	2700	e760	e640	e420	e360	e310	e270	e1000	4100	1870	4150	2110
7	2890	e740	e640	e410	e360	e310	e270	e1050	3960	4550	3670	2070
8	2750	e720	e640	e410	e350	e310	e270	e1100	5300	5490	3270	2030
9	2570	e720	e640	e410	e350	e310	e280	e1150	6850	4300	2960	1990
10	e2400	e740	e620	e400	e350	e310	e280	e1200	4440	3500	2730	1960
11	2230	e760	e620	e400	e350	e310	e290	e1250	3320	2920	2580	1910
12	2060	e800	e620	e400	e350	e310	e300	e1300	2870	2460	2560	1840
13	1920	e840	e620	e400	e340	e310	e320	1360	2650	2130	3020	1780
14	2090	e880	e600	e390	e340	e310	e320	1500	2390	1950	3420	1740
15	2060	e900	e580	e390	e340	e310	e340	1690	2220	2000	3280	1680
16	e2000	e920	e580	e390	e340	e310	e340	2240	2370	2180	3600	1620
17	e1900	e920	e560	e390	e340	e310	e360	2630	2160	2110	3660	1570
18	e1800	e900	e560	e390	e330	e310	e380	2790	1860	1890	3650	1530
19	e1650	e900	e540	e380	e330	e310	e400	2980	1680	1750	3390	1490
20	e1500	e880	e540	e380	e330	e300	e440	3190	1600	1660	3260	1450
21	e1400	e860	e540	e380	e330	e290	e480	3670	1470	1540	3090	1420
22	e1300	e840	e520	e380	e330	e290	e550	4550	1350	1480	2890	1390
23	e1200	e820	e520	e380	e330	e290	e600	5140	1270	1620	2720	1360
24	e1160	e780	e500	e380	e330	e280	e700	5790	1190	1950	2620	1340
25	e1120	e760	e490	e380	e330	e280	e800	4970	1130	2600	2570	1310
26	e1100	e740	e480	e380	e330	e280	e850	3800	1070	3600	2560	1280
27	e1080	e720	e470	e380	e330	e270	e900	3300	1000	3580	2610	1260
28	e1060	e700	e460	e370	e320	e270	e1000	3490	1050	3560	2530	1230
29	e1040	e700	e450	e370	---	e270	e1050	4150	1200	4350	2410	1190
30	e1000	e680	e450	e370	---	e270	e1100	3120	1400	9630	2280	1160
31	e960	---	e440	e370	---	e270	---	2480	---	10700	2200	---
TOTAL	59590	24220	17620	12260	9610	9300	14240	76140	75460	95600	107760	50410
MEAN	1922	807	568	395	343	300	475	2456	2515	3084	3476	1680
MAX	3630	920	680	440	370	320	1100	5790	6850	10700	8730	2190
MIN	960	680	440	370	320	270	270	1000	1000	1470	2200	1160
AC-FT	118200	48040	34950	24320	19060	18450	28250	151000	149700	189600	213700	99990
CFSM	.89	.37	.26	.18	.16	.14	.22	1.13	1.16	1.42	1.60	.77
IN.	1.02	.42	.30	.21	.16	.16	.24	1.31	1.29	1.64	1.85	.86

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2001, BY WATER YEAR (WY)#

	MEAN	1085	505	355	259	210	190	403	4235	3823	2642	3029	2436
MAX	1969	1028	730	471	449	377	1373	8666	8640	7330	13350	6186	
(WY)	1994	1994	1994	1992	1994	1992	1993	1962	1964	1949	1967	1952	
MIN	484	230	160	130	62.0	60.0	104	1564	963	568	717	636	
(WY)	1959	1954	1954	1954	1953	1953	1974	1964	1969	1958	1966	1966	

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1949 - 2001#
ANNUAL TOTAL	778940	552210	
ANNUAL MEAN	2128	1513	1606
HIGHEST ANNUAL MEAN			2957
LOWEST ANNUAL MEAN			796
HIGHEST DAILY MEAN	25400	10700	94100
LOWEST DAILY MEAN	a150	b270	c60
ANNUAL SEVEN-DAY MINIMUM	150	270	60
INSTANTANEOUS PEAK FLOW		11200	97000
INSTANTANEOUS PEAK STAGE		11.79	21.78
INSTANTANEOUS LOW FLOW			60
ANNUAL RUNOFF (AC-FT)	1545000	1095000	1163000
ANNUAL RUNOFF (CFSM)	.98	.70	.74
ANNUAL RUNOFF (INCHES)	13.35	9.47	10.06
10 PERCENT EXCEEDS	6300	3400	3930
50 PERCENT EXCEEDS	980	1000	646
90 PERCENT EXCEEDS	170	310	170

See Period of Record

a From Mar. 14 to Mar. 22

b From Mar. 27 to Apr. 8

c Monthly mean published for Mar. 1953

e Estimated

15485500 TANANA RIVER AT FAIRBANKS

LOCATION.--Lat 64°47'34", long 147°50'20", in NE¹/₄ SW¹/₄ sec. 25, T. 1 S., R. 2 W. (Fairbanks D-2 quad), Fairbanks North Star Borough, Hydrologic Unit 19040507, on right bank at the end of Groin No. 1 on Corps of Engineers flood-protection levee, 1.0 mi south of Fairbanks International Airport, and 1.0 mi upstream from Chena River.

DRAINAGE AREA.--Undefined. Part of river flows through Salchaket Slough and is ungaged.

PERIOD OF RECORD.--June 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 400 ft above sea level. Prior to September 14, 1973, nonrecording gage, and September 14, 1973 to June 14, 1985, water-stage recorder, at site 2.8 mi upstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 16, 1967 reached a stage of 34.4 ft, from floodmarks at site then in use; discharge, about 125,000 ft³/s, contained in reports of the Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33900	e10000	e6800	e6000	e6000	e5800	e5600	e11500	21600	44400	78000	37200
2	32600	e9200	e6600	e6000	e6000	e5800	e5600	e11500	22200	43900	77700	35800
3	30400	e8800	e6600	e6000	e6000	e5800	e5600	e11500	23800	43400	74800	36300
4	28800	e8600	e6600	e6000	e6000	e5800	e5600	e11500	25800	43900	72700	42900
5	27200	e8400	e6600	e6000	e6000	e5800	e5600	e12000	27000	44900	71000	42100
6	26500	e8200	e6600	e6000	e6000	e5800	e5600	e12500	28900	45300	68600	39400
7	26600	e8000	e6600	e6000	e5800	e5800	e5600	e13000	30900	46400	65500	37600
8	26400	e7800	e6600	e6000	e5800	e5800	e5600	e14000	33700	48200	63700	34500
9	25900	e7800	e6400	e6000	e5800	e5800	e5800	e14500	36800	45100	63900	32700
10	25000	e8000	e6400	e6000	e5800	e5800	e5800	e15500	36600	43000	63700	31500
11	e24000	e8400	e6400	e6000	e5800	e5800	e5800	e16000	35000	42000	62200	30500
12	e23500	e8600	e6200	e6000	e5800	e5800	e5800	e17300	35100	40200	59600	29500
13	22600	e9000	e6200	e6000	e5800	e5800	e6000	17900	36100	39600	57400	28500
14	22900	e9200	e6200	e6000	e5800	e5800	e6000	17500	37500	39800	56300	27600
15	22700	e9200	e6200	e6000	e5800	e5800	e6200	17200	38000	40800	57900	27600
16	21800	e9200	e6200	e6000	e5800	e5800	e6200	17800	37500	42300	61300	26800
17	20500	e9200	e6200	e6000	e5800	e5800	e6400	18500	37300	43200	64200	26100
18	19700	e9000	e6200	e6000	e5800	e5800	e6600	18900	37600	43700	65500	25400
19	18700	e8800	e6200	e6000	e5800	e5800	e6800	19600	38500	44900	63800	24900
20	16500	e8600	e6200	e6000	e5800	e5800	e7000	20400	40000	46900	61000	24400
21	e15000	e8400	e6200	e6000	e5800	e5800	e7200	22100	41100	50600	59500	24000
22	e14500	e8200	e6200	e6000	e5800	e5800	e7400	23500	42400	57700	59600	23700
23	e14500	e7800	e6200	e6000	e5800	e5800	e7800	24800	43700	60900	62900	23300
24	e14500	e7400	e6200	e6000	e5800	e5800	e8200	25700	44700	61500	56500	22900
25	e14000	e7200	e6200	e6000	e5800	e5600	e8600	26500	45200	63000	51500	22700
26	e13000	e7000	e6200	e6000	e5800	e5600	e9200	25700	45200	64500	48500	22400
27	e13000	e6800	e6200	e6000	e5800	e5600	e9600	24300	45400	66000	46300	21900
28	e13000	e6800	e6200	e6000	e5800	e5600	e10000	23200	45800	67900	43800	21300
29	e12500	e6800	e6200	e6000	---	e5600	e10500	23200	43000	69500	41600	20800
30	e11500	e6800	e6000	e6000	---	e5600	e11000	23000	42900	70400	40300	20300
31	e10500	---	e6000	e6000	---	e5600	---	22000	---	74800	39100	---
TOTAL	642200	247200	195800	186000	163600	178400	208700	572600	1099300	1578700	1858400	864600
MEAN	20720	8240	6316	6000	5843	5755	6957	18470	36640	50930	59950	28820
MAX	33900	10000	6800	6000	6000	5800	11000	26500	45800	74800	78000	42900
MIN	10500	6800	6000	6000	5800	5600	5600	11500	21600	39600	39100	20300
AC-FT	1274000	490300	388400	368900	324500	353900	414000	1136000	2180000	3131000	3686000	1715000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2001, BY WATER YEAR (WY)#

MEAN	13470	7627	6131	5586	5385	5331	7422	22230	36250	52600	48920	27270
MAX	20720	10370	8090	7135	6700	6761	12700	36290	51350	66090	70080	44880
(WY)	2001	1986	1986	1986	1991	1993	1995	1991	1992	1992	1997	1990
MIN	8669	5000	4500	4016	3207	3100	4230	14810	25120	39550	34680	16950
(WY)	1997	1977	1977	1974	1974	1974	1974	1998	1978	1996	1996	1976

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1973 - 2001#
ANNUAL TOTAL	7799450	7795500	
ANNUAL MEAN	21310	21360	20030
HIGHEST ANNUAL MEAN			22690
LOWEST ANNUAL MEAN			16080
HIGHEST DAILY MEAN	70600	Aug 16	78000
LOWEST DAILY MEAN	a5200	Mar 7	b5600
ANNUAL SEVEN-DAY MINIMUM	5200	Mar 7	5600
INSTANTANEOUS PEAK FLOW			79000
INSTANTANEOUS PEAK STAGE			25.19
ANNUAL RUNOFF (AC-FT)	15470000	15460000	14510000
10 PERCENT EXCEEDS	49500	49300	50000
50 PERCENT EXCEEDS	12200	11500	10000
90 PERCENT EXCEEDS	5250	5800	5000

See Period of Record, partial years used in monthly statistics
a From Mar. 7 to Apr. 10
b From Mar. 25 to Apr. 8
c From Feb. 14 to Mar. 31, 1974
e Estimated

15493000 CHENA RIVER NEAR TWO RIVERS

LOCATION.--Lat 64°54'10", long 146°21'25", in NE¹/₄ sec. 20, T. 1 N., R. 7 E. (Big Delta D-5 quad), Fairbanks North Star Borough, Hydrologic Unit 19040506, on left bank about 200 ft upstream from bridge at mi 39.5 on the Chena Hot Springs Highway, 15 mi upstream from South Fork Chena River, 22 mi east of Two Rivers, and 41 mi east of Fairbanks.

DRAINAGE AREA.--937 mi².

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 719.7 ft above sea level from datum used by Alaska Department of Transportation and Public Facilities. Prior to April 25, 1994, water stage recorder at site 2.5 mi downstream at datum of 700 ft.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Corps of Engineers meteor-burst and GOES satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 13, 1967 reached a stage of 26.6 ft at site and datum of gage in use prior to April 25, 1994, from floodmarks, discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1780	e430	e290	e190	e160	e150	e120	e335	829	721	2020	1180
2	1670	e420	e280	e190	e160	e150	e120	e325	854	1020	1600	1130
3	1460	e410	e280	e190	e160	e150	e120	e320	898	1200	1400	1110
4	1410	e390	e280	e190	e160	e150	e120	e315	871	946	1640	1070
5	1510	e380	e280	e190	e160	e140	e120	e350	927	844	1680	1030
6	1560	e380	e270	e180	e160	e140	e120	e390	1010	1760	1480	1010
7	1460	e370	e270	e180	e160	e140	e120	e440	1110	2690	1290	979
8	1390	e360	e270	e180	e160	e140	e120	483	2260	1940	1150	962
9	1300	e350	e270	e180	e150	e140	e120	518	2240	1410	1050	961
10	1080	e380	e270	e180	e150	e140	e125	607	1360	1110	985	947
11	e900	e400	e260	e180	e150	e140	e125	675	1040	909	976	918
12	e880	e460	e260	e180	e150	e140	e130	687	906	795	1140	891
13	e970	e500	e260	e180	e150	e140	e135	699	843	715	1370	865
14	1140	e550	e250	e180	e150	e140	e140	802	792	758	1360	834
15	1100	e550	e250	e170	e150	e140	e145	1060	739	1050	1830	804
16	1030	e540	e250	e170	e150	e140	e150	1260	705	1020	2290	778
17	923	e530	e240	e170	e150	e140	e160	1280	625	824	3090	764
18	e760	e520	e230	e170	e150	e135	e175	1330	565	718	2700	745
19	e720	e500	e230	e170	e150	e135	e190	1410	527	645	2660	727
20	e680	e490	e220	e170	e150	e135	e200	1600	515	591	2380	712
21	e650	e480	e220	e170	e150	e130	e210	1780	491	555	2070	696
22	e620	e440	e220	e170	e150	e130	e230	2070	454	545	1820	682
23	e600	e420	e210	e170	e150	e125	e240	2390	426	608	1660	669
24	e580	e380	e210	e170	e150	e125	e255	2160	407	664	1690	660
25	e600	e340	e210	e170	e150	e120	e270	1830	385	662	1730	641
26	e680	e320	e200	e170	e150	e120	e285	1520	364	741	1640	626
27	e640	e320	e200	e160	e150	e120	e295	1380	352	788	1530	613
28	e580	e310	e200	e160	e150	e120	e310	1570	364	843	1430	597
29	e520	e300	e200	e160	---	e120	e325	1260	360	2460	1330	580
30	e460	e290	e200	e160	---	e120	e340	946	372	3640	1250	566
31	e450	---	e190	e160	---	e120	---	842	---	2680	1210	---
TOTAL	30103	12510	7470	5410	4280	4175	5515	32634	23591	35852	51451	24747
MEAN	971	417	241	175	153	135	184	1053	786	1157	1660	825
MAX	1780	550	290	190	160	150	340	2390	2260	3640	3090	1180
MIN	450	290	190	160	150	120	120	315	352	545	976	566
AC-FT	59710	24810	14820	10730	8490	8280	10940	64730	46790	71110	102100	49090
CFSM	1.04	.45	.26	.19	.16	.14	.20	1.12	.84	1.23	1.77	.88
IN.	1.20	.50	.30	.21	.17	.17	.22	1.30	.94	1.42	2.04	.98

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2001, BY WATER YEAR (WY)

	MEAN	570	274	187	132	107	93.8	226	1845	1364	1027	1271	1134
	MAX	1656	617	369	242	246	171	578	4210	4038	2505	3207	2702
	(WY)	1987	1987	1994	1994	1994	1991	1989	1971	1992	1984	1969	1990
	MIN	260	120	85.5	38.1	20.2	21.9	68.3	625	323	380	437	455
	(WY)	1969	1969	1977	1970	1970	1970	1982	1998	1969	1976	1976	1976

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1968 - 2001
ANNUAL TOTAL	330930	237738	
ANNUAL MEAN	904	651	689
HIGHEST ANNUAL MEAN			1080
LOWEST ANNUAL MEAN			398
HIGHEST DAILY MEAN	9530	3640	17700
LOWEST DAILY MEAN	a92	b120	c20
ANNUAL SEVEN-DAY MINIMUM	92	120	20
MAXIMUM PEAK FLOW		4430	20000
MAXIMUM PEAK STAGE		18.29	d22.04
ANNUAL RUNOFF (AC-FT)	656400	471600	499500
ANNUAL RUNOFF (CFSM)	.96	.70	.74
ANNUAL RUNOFF (INCHES)	13.14	9.44	10.00
10 PERCENT EXCEEDS	2310	1510	1620
50 PERCENT EXCEEDS	486	426	325
90 PERCENT EXCEEDS	96	140	82

a From Mar. 17 to Mar. 26

b From Mar. 25 to Apr. 9

c From Feb. 6 to Mar. 12, 1970

d At site and datum then in use

e Estimated

15511000 LITTLE CHENA RIVER NEAR FAIRBANKS

LOCATION.--Lat 64°53'10", long 147°14'50", in SW¹/₄ NE¹/₄ sec. 25, T. 1 N., R. 2 E. (Fairbanks D-1 quad), Fairbanks North Star Borough, Hydrologic Unit 19040506, on downstream side of left bridge abutment at mi 11.9 Chena Hot Springs Highway, 22.5 mi upstream from mouth, and 14 mi northeast of Fairbanks.

DRAINAGE AREA.--372 mi².

PERIOD OF RECORD.--August 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 458.79 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor. Corps of Engineers meteor-burst and NOAA telephone telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	486	e170	e120	e90	e80	e70	e50	e130	190	150	344	399
2	e440	e160	e120	e90	e80	e70	e50	e120	183	181	298	381
3	e410	e150	e120	e90	e80	e70	e50	e120	177	210	270	370
4	e380	e150	e120	e90	e80	e70	e50	e120	172	198	271	361
5	e360	e140	e120	e90	e80	e70	e50	e120	168	194	276	344
6	e370	e140	e120	e90	e80	e70	e50	e130	171	218	265	333
7	e380	e140	e120	e90	e75	e70	e50	e140	236	310	248	321
8	e380	e130	e120	e90	e75	e70	e50	e150	674	300	233	310
9	e370	e130	e110	e90	e75	e65	e50	e160	894	254	221	307
10	e340	e130	e110	e85	e75	e65	e50	e180	528	224	212	297
11	e310	e140	e110	e85	e75	e65	e50	e200	400	202	218	288
12	e300	e150	e110	e85	e75	e65	e55	e220	326	190	258	281
13	e310	e160	e110	e85	e75	e65	e55	232	314	175	349	272
14	e320	e160	e110	e85	e75	e65	e55	263	317	190	366	263
15	e320	e170	e110	e85	e75	e65	e55	290	274	241	539	255
16	e300	e170	e110	e85	e75	e65	e60	296	240	234	707	248
17	e290	e160	e110	e85	e75	e65	e60	289	215	203	851	243
18	e270	e160	e110	e85	e75	e65	e60	277	195	187	763	238
19	e260	e160	e110	e85	e75	e60	e65	277	181	175	752	232
20	e240	e150	e110	e85	e75	e60	e70	301	180	165	687	228
21	e230	e150	e100	e85	e75	e60	e75	309	178	159	606	225
22	e220	e150	e100	e85	e70	e60	e80	323	164	156	544	220
23	e210	e150	e100	e85	e70	e55	e85	350	154	155	503	217
24	e200	e140	e100	e85	e70	e55	e95	369	147	154	495	213
25	e200	e140	e95	e85	e70	e55	e110	384	140	150	507	207
26	e210	e140	e95	e85	e70	e55	e110	390	135	148	518	204
27	e220	e130	e95	e80	e70	e50	e120	328	131	150	482	199
28	e210	e130	e95	e80	e70	e50	e120	306	130	158	450	195
29	e200	e130	e95	e80	---	e50	e130	273	128	284	424	191
30	e190	e130	e90	e80	---	e50	e130	231	127	524	401	188
31	e180	---	e90	e80	---	e50	---	203	---	411	389	---
TOTAL	9106	4410	3335	2655	2095	1920	2140	7481	7469	6650	13447	8030
MEAN	294	147	108	85.6	74.8	61.9	71.3	241	249	215	434	268
MAX	486	170	120	90	80	70	130	390	894	524	851	399
MIN	180	130	90	80	70	50	50	120	127	148	212	188
AC-FT	18060	8750	6610	5270	4160	3810	4240	14840	14810	13190	26670	15930
CFSM	.79	.40	.29	.23	.20	.17	.19	.65	.67	.58	1.17	.72
IN.	.91	.44	.33	.27	.21	.19	.21	.75	.75	.67	1.34	.80

e Estimated

15511000 LITTLE CHENA RIVER NEAR FAIRBANKS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2001, BY WATER YEAR (WY)#

MEAN	194	104	70.7	47.4	35.4	31.0	90.7	551	344	289	382	318
MAX	490	264	176	112	74.8	72.0	270	1217	932	665	2147	686
(WY)	1987	1994	1986	1987	2001	1993	1993	1991	1992	1981	1967	1985
MIN	69.8	32.0	22.5	7.90	6.00	3.23	19.1	147	99.2	85.0	124	107
(WY)	1967	1967	1978	1970	1970	1967	1970	1998	1998	1997	1997	1966

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR			FOR 2001 WATER YEAR			WATER YEARS 1966 - 2001#		
ANNUAL TOTAL	94881			68738					
ANNUAL MEAN	259			188			207		
HIGHEST ANNUAL MEAN							414		
LOWEST ANNUAL MEAN							103		
HIGHEST DAILY MEAN	1430	May 25		894	Jun 9		12000	Aug 13	1967
LOWEST DAILY MEAN	a24	Mar 16		b50	Mar 27		c.00	Mar 11	1967
ANNUAL SEVEN-DAY MINIMUM	24	Mar 16		50	Mar 27		.00	Mar 11	1967
MAXIMUM PEAK FLOW				1110	Jun 9		d17000	Aug 13	1967
MAXIMUM PEAK STAGE				18.23	Jun 9		31.95	Aug 13	1967
MAXIMUM PEAK STAGE				f19.66	Oct 3				
ANNUAL RUNOFF (AC-FT)	188200			136300			149600		
ANNUAL RUNOFF (CFSM)	.70			.51			.56		
ANNUAL RUNOFF (INCHES)	9.49			6.87			7.54		
10 PERCENT EXCEEDS	639			369			466		
50 PERCENT EXCEEDS	174			150			120		
90 PERCENT EXCEEDS	25			65			25		

See Period of Record; partial years used in monthly statistics

a From Mar. 16-29

b From Mar. 27 to Apr. 11

c From Mar. 11 to Apr. 15, 1967

d From rating curve extended above 3,000 ft³/s on basis of contracted-opening determination of peak flow

e Estimated

f Backwater from ice

15514000 CHENA RIVER AT FAIRBANKS

LOCATION.--Lat 64°50'45", long 147°42'04", in NW $\frac{1}{4}$ sec. 11, T. 1 S., R. 1 W. (Fairbanks D-2 quad), Fairbanks North Star Borough, Hydrologic Unit 19040506, on right bank 100 ft downstream from Steese Highway Bridge, 800 ft upstream from Wendell Street bridge, 0.3 mi upstream from Noyes Slough, 11 mi upstream from mouth, and 11 mi downstream from Chena Slough.

DRAINAGE AREA.--1,995 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1947 to September 1948 (no winter records), October 1948 to current year.

GAGE.--Water-stage recorder and supplementary gage. Datum of gage is 422.92 ft above sea level. Supplementary gage, Chena River at Lathrop Street (15514003), 1.6 mi downstream on left bank, used during winter period. See WSP 1936 and 2136 for history of changes prior to April 27, 1968.

REMARKS.--Records are good except for estimated daily discharges, which are fair. Regulation during high-flow periods began July 9, 1981 at Moose Creek Dam 31.8 mi upstream. Flows were not regulated this year. GOES satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD--Outstanding floods occurred in early May 1905 and 1911, late August 1930, and May 11-14, 1937. See WDR AK-90-1 for more information.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3640	e920	e715	e490	e440	e390	e330	e960	1570	847	4080	2380
2	3300	e840	e710	e490	e440	e390	e330	975	1470	910	3560	2320
3	3070	e810	e705	e480	e440	e390	e330	920	1430	1200	3060	2250
4	2850	e780	e700	e480	e430	e390	e330	895	1420	1450	2740	2190
5	2760	e760	e700	e470	e430	e390	e330	900	1410	1470	2690	2150
6	2840	e730	e700	e470	e430	e390	e330	904	1400	1430	2770	2080
7	2870	e700	e700	e470	e430	e390	e330	934	1470	1600	2630	2020
8	2800	e680	e700	e470	e430	e390	e330	972	1670	2680	2410	1960
9	2650	e700	e700	e470	e430	e390	e340	988	2800	2650	2220	1910
10	2410	e780	e695	e460	e420	e390	e340	1050	3310	2280	2070	1890
11	2130	e880	e695	e460	e420	e390	e350	1150	2620	1970	1960	1860
12	1910	e940	e695	e460	e420	e390	e350	1230	2180	1740	1910	1820
13	1950	e1000	e695	e460	e410	e390	e360	1290	1930	1570	1990	1770
14	2030	e1040	e695	e450	e400	e390	e360	1350	1810	1450	2280	1720
15	2180	e1100	e680	e450	e400	e390	e370	1430	1700	1500	2430	1670
16	2160	e1100	e660	e450	e400	e390	e380	1540	1600	1610	2960	1620
17	1990	e1060	e640	e450	e400	e390	e390	1690	1500	1670	3580	1570
18	1780	e1040	e615	e450	e400	e390	e410	1750	1400	1530	4340	1530
19	1580	e1020	e600	e450	e390	e380	e420	1780	1320	1410	4280	1500
20	e1400	e1000	e590	e460	e390	e380	e430	1830	1240	1330	4220	1460
21	e1300	e980	e580	e460	e390	e370	e460	1960	1190	1250	3950	1430
22	e1250	e970	e580	e460	e390	e360	e500	2120	1150	1180	3610	1410
23	e1200	e940	e580	e460	e390	e360	e560	2350	1090	1150	3350	1380
24	e1150	e860	e570	e460	e390	e350	e620	2650	1040	1150	3130	1350
25	e1100	e840	e560	e460	e390	e350	e700	2760	992	1190	3040	1330
26	e1200	e820	e550	e460	e390	e350	e760	2620	953	1230	3040	1300
27	e1300	e760	e545	e450	e390	e340	e800	2380	928	1290	2970	1280
28	e1200	e740	e530	e450	e390	e340	e840	2150	894	1370	2850	1250
29	e1100	e720	e515	e450	---	e340	e900	2150	866	1460	2730	1230
30	e1000	e700	e510	e450	---	e330	e930	2020	851	2380	2590	1200
31	e960	---	e500	e450	---	e330	---	1750	---	4180	2460	---
TOTAL	61060	26210	19610	14300	11470	11600	14210	49448	45204	50127	91900	50830
MEAN	1970	874	633	461	410	374	474	1595	1507	1617	2965	1694
MAX	3640	1100	715	490	440	390	930	2760	3310	4180	4340	2380
MIN	960	680	500	450	390	330	330	895	851	847	1910	1200
MED	1950	850	660	460	400	390	375	1540	1420	1450	2850	1640
AC-FT	121100	51990	38900	28360	22750	23010	28190	98080	89660	99430	182300	100800
CFSM	.99	.44	.32	.23	.21	.19	.24	.80	.76	.81	1.49	.85
IN.	1.14	.49	.37	.27	.21	.22	.26	.92	.84	.93	1.71	.95

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2001, BY WATER YEAR (WY)

	1202	593	448	343	283	261	469	3635	2565	2029	2458	2158
MEAN	1202	593	448	343	283	261	469	3635	2565	2029	2458	2158
MAX	2413	1231	922	595	509	445	1406	10250	6721	6133	13120	5735
(WY)	1962	1994	1994	1987	1968	1968	1993	1948	1949	1949	1967	1962
MIN	461	297	194	163	120	120	209	1050	816	665	682	615
(WY)	1967	1959	1977	1977	1953	1958	1977	1998	1969	1958	1957	1957

15514000 CHENA RIVER AT FAIRBANKS--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1948 - 2001#	
ANNUAL TOTAL	629589		445969			
ANNUAL MEAN	1720		1222		1387	
HIGHEST ANNUAL MEAN					5119	
LOWEST ANNUAL MEAN					713	
HIGHEST DAILY MEAN	8620	Aug 16	4340	Aug 18	64600	Aug 15 1967
LOWEST DAILY MEAN	a230	Mar 11	b330	Mar 30	c120	Feb 1 1953
ANNUAL SEVEN-DAY MINIMUM	230	Mar 11	330	Mar 30	120	Feb 1 1953
INSTANTANEOUS PEAK FLOW			4460	Aug 18	74400	Aug 15 1967
INSTANTANEOUS PEAK STAGE			4.80	Aug 18	d18.82	Aug 15 1967
ANNUAL RUNOFF (AC-FT)	1249000		884600		1005000	
ANNUAL RUNOFF (CFSM)	.86		.61		.70	
ANNUAL RUNOFF (INCHES)	11.74		8.32		9.45	
10 PERCENT EXCEEDS	4060		2640		3140	
50 PERCENT EXCEEDS	1100		953		725	
90 PERCENT EXCEEDS	250		390		240	

See Period of Record

a Mar. 11 to Mar.17

b Mar. 30 to Apr. 8

c Monthly means published for Feb. 1953 and Mar. 1958

d Site then in use

e Estimated

15514000 CHENA RIVER AT FAIRBANKS--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1948-58, 1962-72, 1974-76, 1983-84, and 2001.

PERIOD OF RECORD.--
SUSPENDED SEDIMENT DISCHARGE, 1962-71.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	STREAM WIDTH (FT) (000004)	GAGE HEIGHT (FEET) (000065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (000061)	SAM- PLING METHOD, TYPE CODES (82398)	SAMPLER TYPE (CODE) (84164)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
MAY											
11...	1630	205	--	1160	10	3007	1.5	1.5	18	56	81
25...	1220	--	6.46	2780	10	3007	3.5	--	174	1310	75

15515500 TANANA RIVER AT NENANA

LOCATION.--Lat 64°33'55", long 149°05'30", in SE¹/₄ sec. 14, T. 4 S., R. 8 W. (Fairbanks C-5 quad), Hydrologic Unit 19040507, on left bank on east end of Alaska Railroad dock in Nenana, and 0.3 mi upstream from Nenana River.

DRAINAGE AREA.--25,600 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1962 to current year.

REVISED RECORDS.--WSP 2136: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 338.50 ft above sea level. Prior to March 10, 1965, on right bank 280 ft downstream from railroad bridge 0.5 mi upstream at present datum. March 10, 1965 to March 23, 1968, nonrecording gage on railroad bridge 0.5 mi upstream at present datum.

REMARKS.--Records fair. GOES satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 1948 reached a stage of 15.9 ft, discharge, about 135,000 ft³/s, contained in reports of Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42700	e15000	e8800	e7800	e7700	e7600	e7400	e13500	27300	54800	93300	48100
2	40700	e14000	e8800	e7800	e7700	e7600	e7400	e13500	28000	55200	92900	46000
3	37900	e13000	e8800	e7800	e7700	e7600	e7400	e13500	29700	54800	90300	45000
4	35800	e12000	e8600	e7800	e7700	e7600	e7400	e13500	30100	54700	88100	48400
5	35000	e11000	e8600	e7800	e7700	e7600	e7400	e14000	31600	55000	86200	51800
6	34300	e11000	e8600	e7800	e7700	e7600	e7400	e15000	34500	55000	81600	49900
7	33900	e10500	e8600	e7800	e7700	e7600	e7400	e16000	38100	55600	77200	47700
8	33500	e10500	e8600	e7800	e7700	e7600	e7500	e16500	41100	56600	74000	44500
9	32800	e11000	e8400	e7800	e7700	e7600	e7500	e17500	43800	54900	72800	41600
10	31900	e11000	e8400	e7800	e7700	e7600	e7500	e18000	47400	52000	71300	39500
11	31200	e11500	e8400	e7800	e7700	e7600	e7500	e18500	47300	50800	69600	38000
12	29900	e11500	e8200	e7800	e7700	e7600	e7600	e19000	48400	49900	67700	36800
13	28500	e11500	e8200	e7800	e7700	e7600	e7800	e19500	47400	49200	65600	35600
14	e27000	e12000	e8200	e7800	e7600	e7600	e7900	20000	46900	48500	65100	34200
15	e26500	e12000	e8200	e7800	e7600	e7600	e8000	19600	46500	48400	66700	33000
16	e26500	e12500	e8200	e7800	e7600	e7600	e8200	20500	47700	49900	70100	32100
17	e26000	e12500	e8000	e7800	e7600	e7600	e8300	22000	49000	51000	73400	31000
18	e25000	e12000	e8000	e7700	e7600	e7600	e8400	23000	49400	52000	74600	30000
19	e24000	e12000	e8000	e7700	e7600	e7600	e8600	23800	50300	52800	73300	29100
20	e23000	e11500	e8000	e7700	e7600	e7500	e8800	25200	52100	55200	71100	28500
21	e22000	e11000	e8000	e7700	e7600	e7500	e9000	26900	53400	59700	69000	27800
22	e21000	e10500	e8000	e7700	e7600	e7500	e9400	28300	53600	64300	67700	27300
23	e20000	e10500	e8000	e7700	e7600	e7500	e9800	29300	54600	68200	69400	26900
24	e19000	e10000	e8000	e7700	e7600	e7500	e10000	30300	55700	68800	68100	26400
25	e19000	e9600	e8000	e7700	e7600	e7500	e10500	30900	55400	68400	62800	26000
26	e18500	e9400	e8000	e7700	e7600	e7400	e11000	30200	56100	70500	59600	25700
27	e18500	e9200	e8000	e7700	e7600	e7400	e11500	29000	56800	72600	56900	25300
28	e18000	e9000	e7800	e7700	e7600	e7400	e12000	28300	57200	76700	54100	24900
29	e18000	e9000	e7800	e7700	---	e7400	e12500	28500	55200	78100	51700	24300
30	e17000	e8800	e7800	e7700	---	e7400	e13000	28900	53200	81500	50600	23700
31	e16000	---	e7800	e7700	---	e7400	---	27800	---	88500	49400	---
TOTAL	833100	335000	254800	240400	214100	233800	264100	680500	1387800	1853600	2184200	1049100
MEAN	26870	11170	8219	7755	7646	7542	8803	21950	46260	59790	70460	34970
MAX	42700	15000	8800	7800	7700	7600	13000	30900	57200	88500	93300	51800
MIN	16000	8800	7800	7700	7600	7400	7400	13500	27300	48400	49400	23700
MED	26500	11000	8200	7800	7600	7600	8100	20500	48000	55000	69600	32600
AC-FT	1652000	664500	505400	476800	424700	463700	523800	1350000	2753000	3677000	4332000	2081000
CFSM	1.05	.44	.32	.30	.30	.29	.34	.86	1.81	2.34	2.75	1.37
IN.	1.21	.49	.37	.35	.31	.34	.38	.99	2.02	2.69	3.17	1.52

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2001, BY WATER YEAR (WY)#

	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
MEAN	16930	9261	7369	6744	6530	6463	8741	30790	47630	59950	56830	33500
MAX	26870	14070	10770	9065	8171	8161	15090	62210	87390	76770	98210	57690
(WY)	2001	1986	1986	1986	1986	1993	1995	1963	1962	1988	1967	1990
MIN	11420	5517	4532	4694	4421	4071	5870	16030	29750	44920	41510	21710
(WY)	1977	1977	1977	1977	1974	1974	1974	1964	1970	1996	1996	1976

e Estimated

15515500 TANANA RIVER AT NENANA--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1962 - 2001#	
ANNUAL TOTAL	9725800		9530500		24120	
ANNUAL MEAN	26570		26110		29310	1967
HIGHEST ANNUAL MEAN					19530	1970
LOWEST ANNUAL MEAN					183000	Aug 18 1967
HIGHEST DAILY MEAN	87800	Aug 16	93300	Aug 1	c4000	Mar 6 1974
LOWEST DAILY MEAN	a6000	Mar 6	b7400	Mar 26	4000	Mar 6 1974
ANNUAL SEVEN-DAY MINIMUM	6000	Mar 6	7400	Mar 26	186000	Aug 18 1967
INSTANTANEOUS PEAK FLOW			94200	Aug 1	d18.90	Aug 18 1967
INSTANTANEOUS PEAK STAGE			12.47	Aug 1		
ANNUAL RUNOFF (AC-FT)	19290000		18900000		17480000	
ANNUAL RUNOFF (CFSM)	1.04		1.02		.94	
ANNUAL RUNOFF (INCHES)	14.13		13.85		12.80	
10 PERCENT EXCEEDS	58400		59600		59000	
50 PERCENT EXCEEDS	17000		13500		12000	
90 PERCENT EXCEEDS	6000		7600		6200	

See Period of Record, partial years used in monthly statistics

a From Mar. 6 to Apr. 11

b From Mar. 26 to Apr. 7

c From Mar. 6 to Mar. 20, 1974

d At site then in use

e Estimated

15515500 TANANA RIVER AT NENANA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954-57, 1963-64, 1966-75, 1978-1995, and 2001.

PERIOD OF RECORD.--

WATER TEMPERATURE: 1954 to 1956 (seasonal).

WATER QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM R BK) (72103)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
MAY								
31...	1845	624.0	217	7.8	10.0	758	10.2	91
31...	1846	520.0	216	7.8	10.0	758	10.4	93
31...	1847	450.0	216	7.8	10.0	758	10.3	92
31...	1848	350.0	216	7.9	10.0	758	10.4	93
31...	1849	230.0	217	7.8	10.0	758	10.3	92
JUN								
22...	1529	131.0	240	7.8	17.0	764	8.8	91
22...	1532	258.0	239	7.8	17.0	764	8.8	91
22...	1534	356.0	239	7.8	17.0	764	8.8	91
22...	1543	442.0	239	7.8	17.0	764	8.7	90
22...	1545	541.0	239	7.8	17.0	764	8.7	90
JUL								
09...	1523	663.0	224	8.0	12.5	759	10.2	96
09...	1524	568.0	223	8.0	12.5	759	10.2	96
09...	1526	463.0	225	8.0	12.5	759	10.3	97
09...	1528	383.0	225	8.0	12.5	759	10.2	96
09...	1530	283.0	225	8.0	12.5	759	10.2	96
AUG								
02...	1718	120.0	207	7.7	13.5	--	10.2	--
02...	1720	220.0	207	7.8	13.5	--	10.0	--
02...	1722	300.0	207	7.8	13.5	--	10.0	--
02...	1723	400.0	208	7.7	13.5	--	10.0	--
02...	1724	540.0	208	7.7	13.5	--	9.9	--
SEP								
13...	1654	100.0	257	7.5	8.5	752	10.9	95
13...	1655	170.0	257	7.6	8.5	752	10.9	94
13...	1656	205.0	257	7.6	8.5	752	10.9	94
13...	1657	260.0	257	7.6	8.5	752	10.8	94
13...	1659	365.0	257	7.6	8.5	752	10.8	94

DATE	TIME	MEDIUM CODE	SAMPLE TYPE	STREAM WIDTH (FT) (00004)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM- PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	QUALITY ASSUR- ANCE DATA INDICA- TOR CODE (99111)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPERA- TURE AIR (DEG C) (00020)	TEMP- ERATURE WATER (DEG C) (00010)
OCT													
03...	1600	9	9	874	6.09	36600	20	3055	1	242	7.9	.00	.00
MAR													
20...	1640	9	9	685	--	7550	20	3044	100	287	7.2	-9.0	.00
MAY													
31...	1820	9	7	E830	4.78	27500	20	3055	30	216	7.8	12.5	10.0
JUN													
22...	1500	9	9	--	8.10	53400	20	3055	30	239	7.8	--	17.2
JUL													
09...	1440	9	9	773	8.21	54400	20	3055	30	224	8.0	18.0	12.5
AUG													
02...	1630	9	9	760	12.37	98800	20	3055	30	207	7.7	--	13.5
SEP													
13...	1510	9	7	560	5.84	35200	20	3055	100	257	7.6	--	8.5

15515500 TANANA RIVER AT NENANA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TURBID- ITY (NTU) (00076)	TURBID- ITY LAB HACH (NTU) (99872)	UV ABSOR- BANCE 254 NM, WTR FLT (UNITS/ CM) (50624)	UV ABSOR- BANCE 280 NM, (UNITS/ CM) (61726)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN DIS- OLVED (MG/L) (00300)	OXY- GEN, DIS- OLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CAL- CIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM DIS- SOLVED (MG/L AS NA) (00930)	ANC WATER UNFL- TRD FET FIELD MG/L AS CACO3 (00410)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
OCT 03...	57	98	--	--	762	13.3	91	120	34.4	8.38	3.9	83	1.40
MAR 20...	4.5	3.7	.029	.021	775	9.6	65	150	45.8	9.28	4.0	120	2.28
MAY 31...	--	89	.243	.182	758	10.3	92	100	30.2	6.87	3.3	77	1.64
JUN 22...	--	640	.065	.047	764	8.8	91	110	31.4	7.72	3.3	74	2.12
JUL 09...	--	550	.075	.054	759	10.2	96	100	28.8	7.04	3.4	66	1.78
AUG 02...	--	730	.415	.104	758	10.0	96	94	27.4	6.22	2.9	67	1.89
SEP 13...	--	67	.110	.080	752	10.9	94	120	35.6	8.68	3.8	91	1.68
DATE	BICAR- BONATE DIS IT FIELD MG/L AS HCO3 (00453)	CARBOR- NATE DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SUL- FATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLOU- RIDE DIS- SOLVED (MG/L AS F) (00950)	SIL- ICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOL- IDS, RISI- DUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOL- IDS, SUM OF CON- STITU- ENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMO- NIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMO- NIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT 03...	101	.0	83	38.1	1.5	.1	10.1	165	149	.001	.171	.010	.34
MAR 20...	148	.0	121	33.2	1.3	E.1	14.4	192	184	.002	.162	.048	.14
MAY 31...	93	.0	76	27.6	1.4	E.1	8.7	151	126	.001	.066	<.002	.43
JUN 22...	90	.0	89	38.7	<.1	E.1	6.6	141	--	.001	.085	.003	.61
JUL 09...	80	.0	65	36.3	1.8	E.1	6.5	142	125	.001	.075	.006	.43
AUG 02...	83	.0	68	31.1	1.1	E.1	6.7	134	119	.002	.062	.002	.70
SEP 13...	111	.0	91	42.8	1.8	E.1	9.5	176	159	E.002	E.089	E.010	E.30

15515500 TANANA RIVER AT NENANA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITRO- GEN, AMMO- NIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	NITRO- GEN, TOTAL, SED- IMNT SUSP, (WEIGHT PERCNT) (62845)	PHOS- PHORUS SEDI- MENT SUSP. PER- CENT (30282)	ALUMI- NUM SED, SUS PER- CENT (30221)	ALUMI- NUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY SED, SUSP. (UG/G) (29816)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC SED, SUSP. (UG/G) (29818)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM SED. SUSP. (UG/G) (29820)
OCT 03...	.17	.509	E.005	.005	.03	.06	6.2	18	.8	.20	9.9	<2.0	710
MAR 20...	.10	.028	<.006	<.007	--	--	--	1	--	.16	--	.5	--
MAY 31...	.19	.331	.007	<.007	<.10	.06	6.4	19	1.2	.19	12	1.0	710
JUN 22...	<.10	1.15	E.005	<.007	<.10	.08	8.0	21	1.6	.35	19	1.1	950
JUL 09...	E.07	.695	E.003	<.007	<.10	.07	7.2	17	1.5	.28	14	.9	820
AUG 02...	.14	1.86	E.004	<.007	<.10	.08	7.4	20	1.7	.36	18	1.1	870
SEP 13...	E.12	E.512	E.003	<.007	<.10	.07	6.5	12	1.1	.22	12	.9	760

DATE	BAR- IUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM SED, SUSP. (UG/G) (29822)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON DIS- SOLVED (UG/L AS B) (01020)	CAD- MIUM SED. SUSP. (UG/G) (29826)	CAD- MIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM SED. SUSP. (UG/G) (29829)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT SEDI- MENT SUSP. (UG/G) (35031)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER SED. SUSP. (UG/G) (29832)	COP- PER, DIS- SOLVED (UG/L AS CU) (01040)	IRON SEDI- MENT SUSP. PERCENT (30269)
OCT 03...	27.9	1	<.06	23	.3	E.03	87	<.8	14	.20	29	2.9	3.2
MAR 20...	47.3	--	<.06	20	--	E.02	--	<.8	--	.21	--	.8	--
MAY 31...	29.4	1	<.06	19	.2	E.02	89	E.5	15	.15	33	3.9	3.5
JUN 22...	34.8	2	<.06	25	.2	<.04	110	E.5	22	.08	55	1.7	4.6
JUL 09...	30.0	2	<.06	19	.3	E.03	90	<.8	19	.10	46	1.8	4.0
AUG 02...	31.4	2	<.06	15	.4	E.02	91	<.8	18	.12	42	2.8	4.1
SEP 13...	32.5	1	<.06	18	.3	E.02	88	<.8	15	.14	35	2.6	3.4

DATE	IRON DIS- SOLVED (UG/L AS FE) (01046)	LEAD SED. SUSP. (UG/G) (29836)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITH- IUM SEDI- MENT SUSP. (UG/G) (35050)	LITH- IUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE SED. SUSP. (UG/G) (29839)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MER- CURY SED, SUSP. (UG/G) (29841)	MOLYB- DENUM SED. SUSP. (UG/G) (29843)	MOLYB- DENUM, DIS- SOLVED (UG/LAS MO) (01060)	NICKEL SED. SUSP. (UG/G) (29845)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM SED. SUSP. (UG/G) (29847)
OCT 03...	80	10	E.06	18	E2.9	670	30.0	.02	<5	1.0	42	1.40	M
MAR 20...	40	--	<.08	--	2.8	--	86.0	--	--	1.1	--	.76	--
MAY 31...	130	14	.09	19	2.5	730	20.5	.03	3	.8	44	.40	M
JUN 22...	10	18	<.08	31	4.2	890	3.3	.09	2	1.1	54	.47	M
JUL 09...	M	15	.14	27	3.6	750	10	.06	2	1.0	49	.56	M
AUG 02...	20	15	E.06	23	3.4	760	14.5	.05	2	1.0	44	.67	M
SEP 13...	40	13	.11	20	3.5	700	25.4	.02	2	1.0	42	.19	M

15515500 TANANA RIVER AT NENANA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SELE- NIUM DIS- SOLVED (UG/L AS SE) (01145)	SILVER SED. SUSP. (UG/G) (29850)	SIL- VER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM SEDI- MENT (UG/G) (35040)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	THAL- LIUM SUS SED (UG/G) (49955)	TITA- NIUM SEDI- MENT PERCENT (30317)	VANA- DIUM SED, SUSP. (UG/G) (29853)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC SED. SUSP. (UG/G) (29855)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URA- NIUM SEDI- MENT (UG/G) (35046)	URA- NIUM NATU- RAL DIS- SOLVED (UG/L AS U) (22703)
OCT 03...	<2.4	<.500000	<1.0	240	157	<50	.390	100	<10.0	68	<1	<50	.72
MAR 20...	.7	--	<1.0	--	192	--	--	--	.6	--	<1	--	.69
MAY 31...	.4	<.500000	<1.0	230	137	<50	.390	100	.6	77	<1	<50	.64
JUN 22...	.5	<.500000	<1.0	210	144	<50	.460	140	.5	110	<1	<50	.89
JUL 09...	.4	<.500000	<1.0	220	132	<50	.430	110	.5	98	<1	<50	.77
AUG 02...	.4	<.500000	<1.0	240	120	<50	.440	130	.5	96	2	<50	.77
SEP 13...	.5	<.500000	<1.0	250	158	<50	.410	110	.6	79	1	<50	.80

DATE	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC PARTICU- LATE TOTAL (MG/L AS C) (00689)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON SED, SUSP. PERCENT (30244)	CARBON, ORGANIC SUS- PENDE, TOTAL PERCENT (50465)	NITRO- GEN, PARTICU- LATE WAT FLT SUSP (MG/L AS N) (49570)	SEDI- MENT SUSP., FLOW- THROUGH CENTRIF (MG/L) (50279)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED SUSP. SIEVE DIEM. % FINER THAN .062 MM (70331)
OCT 03...	E5.6	--	--	--	.50	.4	.033	660	802	79300	24
MAR 20...	1 .1	<.1	.2	.3	--	--	<.022	--	16	326	--
MAY 31...	6.5	<.1	2.0	2.1	.70	.5	.242	429	484	35900	36
JUN 22...	1.9	1.1	4.2	5.3	.60	.5	.305	1390	1440	208000	74
JUL 09...	2.2	.8	4.7	5.5	.60	.4	.249	1470	1550	227000	65
AUG 02...	3.9	2.0	9.5	12	.30	.4	.694	2810	2890	771000	65
SEP 13...	E3.4	E.3	E2.0	E2.3	.60	.5	E.059	756	709	67400	--

15518020 HEALY CREEK AT SUNTRANA NEAR HEALY

LOCATION.--Lat 63°51'10", long 148°50'26", in SW¹/₄ sec. 24, T. 12 S., R. 7 W. (Healy D-4 quad), Hydrologic Unit 19040508, on right bank 0.8 mi upstream from Suntrana Creek, 3.8 miles upstream of mouth, and 5.8 miles east-southeast of Healy, Alaska.

DRAINAGE AREA.--approximately 110 mi².

PERIOD OF RECORD.-- September 1998 to current year (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 1500 ft above sea level, from topographic map.

EXTREMES FOR WATER YEAR 1998-- Maximum discharge for period September 1-30, 1998, 227 ft³/s September 21, gage height 18.81 ft; minimum not determined, occurs during the winter.

REMARKS.--Records poor. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	e200
2	---	---	---	---	---	---	---	---	---	---	---	e190
3	---	---	---	---	---	---	---	---	---	---	---	e180
4	---	---	---	---	---	---	---	---	---	---	---	174
5	---	---	---	---	---	---	---	---	---	---	---	171
6	---	---	---	---	---	---	---	---	---	---	---	171
7	---	---	---	---	---	---	---	---	---	---	---	172
8	---	---	---	---	---	---	---	---	---	---	---	167
9	---	---	---	---	---	---	---	---	---	---	---	163
10	---	---	---	---	---	---	---	---	---	---	---	160
11	---	---	---	---	---	---	---	---	---	---	---	156
12	---	---	---	---	---	---	---	---	---	---	---	156
13	---	---	---	---	---	---	---	---	---	---	---	166
14	---	---	---	---	---	---	---	---	---	---	---	178
15	---	---	---	---	---	---	---	---	---	---	---	174
16	---	---	---	---	---	---	---	---	---	---	---	173
17	---	---	---	---	---	---	---	---	---	---	---	186
18	---	---	---	---	---	---	---	---	---	---	---	189
19	---	---	---	---	---	---	---	---	---	---	---	180
20	---	---	---	---	---	---	---	---	---	---	---	186
21	---	---	---	---	---	---	---	---	---	---	---	190
22	---	---	---	---	---	---	---	---	---	---	---	174
23	---	---	---	---	---	---	---	---	---	---	---	170
24	---	---	---	---	---	---	---	---	---	---	---	172
25	---	---	---	---	---	---	---	---	---	---	---	171
26	---	---	---	---	---	---	---	---	---	---	---	170
27	---	---	---	---	---	---	---	---	---	---	---	166
28	---	---	---	---	---	---	---	---	---	---	---	161
29	---	---	---	---	---	---	---	---	---	---	---	155
30	---	---	---	---	---	---	---	---	---	---	---	150
31	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	5171
MEAN	---	---	---	---	---	---	---	---	---	---	---	172
MAX	---	---	---	---	---	---	---	---	---	---	---	200
MIN	---	---	---	---	---	---	---	---	---	---	---	150
AC-FT	---	---	---	---	---	---	---	---	---	---	---	10260

e Estimated

15518020 HEALY CREEK AT SUNTRANA NEAR HEALY--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	144	e110	e90	e70	e55	e50	e60	e75	180	133	146	143
2	140	e110	e90	e70	e55	e50	e60	e70	167	110	131	138
3	139	e105	e85	e70	e55	e50	e60	e65	166	111	114	218
4	141	e105	e85	e70	e55	e50	e60	e60	245	114	116	194
5	139	e105	e85	e70	e55	e50	e55	e55	232	130	102	177
6	140	e105	e85	e65	e55	e50	e55	e55	414	200	99	179
7	137	e100	e80	e65	e55	e50	e55	e60	589	152	87	169
8	127	e100	e80	e65	e55	e50	e55	e65	630	138	98	164
9	e125	e100	e80	e65	e55	e50	e55	e70	542	104	97	154
10	e125	e95	e80	e65	e55	e50	e55	e80	421	104	81	147
11	136	e95	e80	e65	e55	e50	e60	102	367	96	78	142
12	131	e90	e75	e65	e55	e50	e60	279	344	194	91	138
13	131	e90	e75	e65	e55	e50	e65	488	378	127	652	137
14	132	e90	e75	e65	e55	e50	e70	531	345	97	304	134
15	132	e85	e75	e65	e55	e50	e75	645	256	84	431	131
16	131	e85	e75	e60	e55	e55	e80	611	382	93	360	127
17	128	e90	e75	e60	e55	e55	e95	514	427	110	233	e126
18	128	e90	e75	e60	e55	e60	e110	440	264	97	193	e124
19	130	e95	e80	e60	e55	e60	e130	328	167	90	144	123
20	128	e95	e80	e60	e55	e65	e150	277	155	82	131	114
21	125	e95	e80	e60	e50	e65	e110	240	133	238	124	116
22	e120	e90	e80	e60	e50	e65	e85	231	160	388	122	115
23	e126	e90	e75	e60	e50	e65	e65	274	140	312	117	128
24	136	e90	e75	e60	e50	e65	e70	285	137	563	302	122
25	131	e85	e75	e60	e50	e65	e75	403	120	849	355	118
26	118	e85	e75	e60	e50	e65	e80	548	162	407	244	113
27	e110	e85	e75	e60	e50	e65	e85	227	162	285	200	e110
28	e110	e85	e75	e60	e50	e60	e90	159	131	425	174	109
29	e105	e85	e70	e60	---	e60	e95	105	142	253	159	91
30	e105	e90	e70	e60	---	e60	e85	100	194	254	147	e105
31	e105	---	e70	e55	---	e60	---	160	---	150	144	---
TOTAL	3955	2820	2425	1955	1500	1740	2305	7602	8152	6490	5776	4106
MEAN	128	94.0	78.2	63.1	53.6	56.1	76.8	245	272	209	186	137
MAX	144	110	90	70	55	65	150	645	630	849	652	218
MIN	105	85	70	55	50	50	55	55	120	82	78	91
AC-FT	7840	5590	4810	3880	2980	3450	4570	15080	16170	12870	11460	8140

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 1999, BY WATER YEAR (WY)#

	MEAN	128	94.0	78.2	63.1	53.6	56.1	76.8	245	272	209	186	155
MAX	128	94.0	78.2	63.1	53.6	56.1	76.8	245	272	209	186	172	
(WY)	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1998	
MIN	128	94.0	78.2	63.1	53.6	56.1	76.8	245	272	209	186	137	
(WY)	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	

SUMMARY STATISTICS

FOR 1999 WATER YEAR

WATER YEARS 1998 - 1999#

ANNUAL TOTAL	48826												
ANNUAL MEAN	134									134			
HIGHEST ANNUAL MEAN										134		1999	
LOWEST ANNUAL MEAN										134		1999	
HIGHEST DAILY MEAN	849						Jul 25			849		Jul 25 1999	
LOWEST DAILY MEAN	a50						Feb 21			50		Feb 21 1999	
ANNUAL SEVEN-DAY MINIMUM	50						Feb 21			50		Feb 21 1999	
MAXIMUM PEAK FLOW	1210						Aug 13			1210		Aug 13 1999	
MAXIMUM PEAK STAGE	21.69						Aug 13			21.69		Aug 13 1999	
MAXIMUM PEAK STAGE	b22.13						Dec 16			b22.13		Dec 16 1998	
ANNUAL RUNOFF (AC-FT)	96850									96910			
10 PERCENT EXCEEDS	275									255			
50 PERCENT EXCEEDS	95									102			
90 PERCENT EXCEEDS	55									55			

See period of record, partial years used in monthly statistics

a From Feb. 21 to Mar. 15

b Backwater from ice

e Estimated

15518020 HEALY CREEK AT SUNTRANA NEAR HEALY--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	122	e65	e65	e60	e60	e65	e70	e95	e270	192	121	e550
2	119	e65	e60	e60	e60	e65	e70	102	e360	204	115	e480
3	121	e65	e60	e60	e60	e65	e70	100	e500	249	117	e420
4	114	e65	e60	e55	e60	e65	e70	88	e700	207	122	e380
5	e111	e65	e60	e55	e60	e65	e70	68	e1000	230	119	e340
6	108	e65	e60	e55	e60	e65	e70	79	e850	217	143	e400
7	e104	e65	e60	e55	e60	e65	e70	107	e600	200	148	e420
8	e104	e65	e60	e55	e60	e65	e70	116	e400	188	183	e460
9	e100	e65	e60	e55	e60	e65	e70	90	e500	183	245	e420
10	90	e65	e60	e55	e60	e65	e70	75	e600	266	215	e380
11	e85	e65	e60	e55	e60	e65	e70	e65	e700	498	686	e360
12	e85	e65	e60	e55	e60	e65	e70	e60	e500	402	e2500	e340
13	e80	e65	e60	e55	e60	e65	e70	e65	e440	241	e1500	e330
14	e80	e70	e60	e55	e60	e65	e70	e80	e400	196	e900	e320
15	e80	e70	e60	e55	e60	e65	e70	e95	329	191	e700	e300
16	e80	e70	e60	e55	e60	e65	e70	122	257	165	e500	e270
17	e75	e70	e60	e60	e60	e65	e70	145	244	151	e440	e250
18	e75	e70	e60	e60	e60	e65	e70	188	266	135	560	e240
19	e75	e75	e60	e60	e60	e65	e70	191	270	128	530	e240
20	e75	e75	e65	e60	e60	e65	e75	160	218	125	415	e260
21	e75	e75	e65	e65	e60	e65	e75	116	207	124	395	e300
22	e70	e75	e65	e65	e60	e65	e75	e130	339	121	442	e360
23	e70	e70	e65	e65	e60	e65	e75	e150	307	119	395	e350
24	e70	e70	e65	e65	e60	e65	e80	e130	318	119	384	e340
25	e70	e70	e65	e65	e60	e65	e80	e110	308	125	450	e320
26	e70	e70	e65	e65	e60	e65	e80	e100	259	120	435	e310
27	e70	e65	e65	e65	e65	e65	e80	e110	265	129	418	278
28	e70	e65	e65	e65	e65	e65	e85	e120	227	168	457	311
29	e65	e65	e65	e65	e65	e65	e85	e130	219	237	627	286
30	e65	e65	e65	e65	---	e70	e90	e150	213	149	e1100	274
31	e65	---	e60	e60	---	e70	---	e170	---	131	e700	---
TOTAL	2643	2035	1920	1845	1755	2025	2210	3507	12066	5910	16062	10289
MEAN	85.3	67.8	61.9	59.5	60.5	65.3	73.7	113	402	191	518	343
MAX	122	75	65	65	65	70	90	191	1000	498	2500	550
MIN	65	65	60	55	60	65	70	60	207	119	115	240
AC-FT	5240	4040	3810	3660	3480	4020	4380	6960	23930	11720	31860	20410

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2000, BY WATER YEAR (WY)#

	1998	1999	2000	1998	1999	2000	1998	1999	2000	1998	1999	2000
MEAN	106	80.9	70.1	61.3	57.1	60.7	75.2	179	337	200	352	217
MAX	128	94.0	78.2	63.1	60.5	65.3	76.8	245	402	209	518	343
(WY)	1999	1999	1999	1999	2000	2000	1999	1999	2000	1999	2000	2000
MIN	85.3	67.8	61.9	59.5	53.6	56.1	73.7	113	272	191	186	137
(WY)	2000	2000	2000	2000	1999	1999	2000	2000	1999	2000	1999	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1998 - 2000#
ANNUAL TOTAL	46224	62267	
ANNUAL MEAN	127	170	152
HIGHEST ANNUAL MEAN			170
LOWEST ANNUAL MEAN			134
HIGHEST DAILY MEAN	849	Jul 25	e2500 Aug 12 2000
LOWEST DAILY MEAN	a50	Feb 21	b55 Jan 4 1999
ANNUAL SEVEN-DAY MINIMUM	50	Feb 21	55 Jan 4 1999
MAXIMUM PEAK FLOW		c5500	Aug 12 2000
MAXIMUM PEAK STAGE		28.48	Aug 12 2000
ANNUAL RUNOFF (AC-FT)	91690	123500	110100
10 PERCENT EXCEEDS	275	401	343
50 PERCENT EXCEEDS	75	75	90
90 PERCENT EXCEEDS	55	60	60

See period of record, partial years used in monthly statistics

a From Feb. 21 to Mar. 15

b From Jan. 4 to Jan. 16

c From rating curve extended above 450 ft³/s on basis of slope-area measurement of peak flow

e Estimated

15518020 HEALY CREEK AT SUNTRANA NEAR HEALY--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	265	e170	e120	e100	e95	e95	e75	e200	309	161	517	150
2	265	e170	e120	e100	e95	e95	e75	e190	463	170	372	162
3	247	e170	e120	e100	e95	e95	e75	e180	588	162	487	597
4	258	e170	e110	e100	e95	e95	e75	e160	706	172	523	355
5	261	e160	e110	e100	e95	e95	e75	e150	698	176	325	306
6	257	e160	e110	e100	e95	e95	e75	e160	764	369	377	310
7	253	e160	e110	e100	e95	e95	e75	e170	417	466	308	273
8	257	e160	e110	e100	e95	e95	e75	e200	194	298	256	265
9	244	e160	e110	e100	e95	e95	e75	e230	238	219	262	263
10	241	e160	e110	e100	e95	e95	e75	e230	279	173	261	239
11	236	e160	e110	e100	e95	e95	e80	e220	305	176	289	228
12	230	e160	e105	e100	e95	e95	e80	e200	488	143	276	219
13	248	e150	e105	e100	e95	e95	e80	e220	306	134	259	214
14	256	e150	e105	e100	e95	e95	e80	e260	233	143	237	206
15	252	e150	e105	e100	e95	e90	e80	e320	219	138	230	201
16	239	e150	e105	e100	e95	e90	e80	e250	267	142	259	198
17	235	e150	e105	e100	e95	e85	e80	e170	325	144	240	196
18	225	e140	e105	e100	e95	e85	e80	179	365	158	208	199
19	224	e140	e105	e100	e95	e80	e80	235	334	151	202	190
20	210	e140	e105	e100	e95	e80	e85	301	296	147	208	186
21	201	e140	e105	e100	e95	e75	e90	304	294	140	229	184
22	e200	e140	e105	e100	e95	e75	e100	276	278	135	281	182
23	e195	e130	e105	e100	e95	e75	e110	277	314	150	321	175
24	e190	e130	e105	e100	e95	e75	e120	223	252	205	371	172
25	e200	e130	e105	e100	e95	e75	e130	182	230	345	264	170
26	189	e130	e105	e95	e95	e75	e140	176	194	456	192	167
27	173	e120	e105	e95	e95	e75	e150	231	164	635	212	164
28	e180	e120	e105	e95	e95	e75	e160	298	166	443	188	162
29	e180	e120	e100	e95	---	e75	e180	233	220	620	180	158
30	e180	e120	e100	e95	---	e75	e190	212	232	1000	178	146
31	e170	---	e100	e95	---	e75	---	201	---	806	157	---
TOTAL	6961	4410	3325	3070	2660	2665	2925	6838	10138	8777	8669	6637
MEAN	225	147	107	99.0	95.0	86.0	97.5	221	338	283	280	221
MAX	265	170	120	100	95	95	190	320	764	1000	523	597
MIN	170	120	100	95	95	75	75	150	164	134	157	146
AC-FT	13810	8750	6600	6090	5280	5290	5800	13560	20110	17410	17190	13160

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2001, BY WATER YEAR (WY)#

	MEAN	146	103	82.5	73.9	69.6	69.1	82.7	193	337	228	328	218
	MAX	225	147	107	99.0	95.0	86.0	97.5	245	402	283	518	343
	(WY)	2001	2001	2001	2001	2001	2001	2001	1999	2000	2001	2000	2000
	MIN	85.3	67.8	61.9	59.5	53.6	56.1	73.7	113	272	191	186	137
	(WY)	2000	2000	2000	2000	1999	1999	2000	2000	1999	2000	1999	1999

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1998 - 2001#
ANNUAL TOTAL	70365	67075	
ANNUAL MEAN	192	184	163
HIGHEST ANNUAL MEAN			184
LOWEST ANNUAL MEAN			134
HIGHEST DAILY MEAN	2500	1000	2500
LOWEST DAILY MEAN	a55	b75	c50
ANNUAL SEVEN-DAY MINIMUM	55	75	50
MAXIMUM PEAK FLOW		1160	d5500
MAXIMUM PEAK STAGE		21.56	28.48
ANNUAL RUNOFF (AC-FT)	139600	133000	117800
10 PERCENT EXCEEDS	401	305	320
50 PERCENT EXCEEDS	121	158	106
90 PERCENT EXCEEDS	60	90	60

See period of record, partial years used in monthly statistics

a From Jan. 4 to Jan. 16

b From Mar. 21 to Apr. 10

c From Feb. 21 to Mar. 15, 1999

d From rating curve extended above 450 ft³/s on basis of slope-area measurement of peak flow

e Estimated

15518020 HEALY CREEK AT SUNTRANA NEAR HEALY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to 1978, 1998 to current year

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	STREAM WIDTH (FT) (00004)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM- PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	SEDI- MENT, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
MAY 17...	1620	68.0	18.84	162	10	3001	4.5	12.5	646	283	46
JUN 28...	1354	41.0	19.03	146	10	3001	11.5	16.5	93	37	33
AUG 30...	1554	73.0	19.02	173	10	3001	9.5	17.5	34	16	--

15518080 LIGNITE CREEK ABOVE MOUTH NEAR HEALY

LOCATION.--Lat 63°54'17", long 148°59'01", in SE¹/₄ NE¹/₄ sec. 6, T. 11 S., R. 7 W. (Healy D-4 quad), Hydrologic Unit 19040508, on right bank 300 ft downstream from culverts on access road to Usibelli Coal Mine office, 1,000 ft upstream from mouth, and 3.5 mi north of Healy.

DRAINAGE AREA.--48.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1985 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,300 ft above sea level, from topographic map. Prior to May 22, 1987 on left bank, 400 ft upstream at same datum. From May 22, 1987 to September 30, 1997 on left bank, 300 ft upstream at same datum.

REMARKS.--Records fair except for estimated daily discharges which are poor. Precipitation gage at station; daily values of precipitation are available from the computer files of the Alaska District. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	e28	e21	e16	e15	e14	e11	e46	37	21	121	28
2	e26	e27	e20	e16	e15	e14	e11	e42	40	21	69	29
3	e31	e27	e20	e16	e15	e14	e11	e36	39	21	87	50
4	e36	e27	e20	e16	e15	e14	e11	e40	40	21	118	36
5	e35	e27	e20	e16	e15	e14	e11	76	38	23	69	34
6	e32	e27	e19	e16	e15	e14	e11	60	35	45	56	36
7	e30	e27	e19	e16	e15	e14	e11	53	36	64	48	33
8	e29	e27	e19	e16	e15	e14	e11	62	34	50	44	38
9	e28	e26	e19	e16	e15	e14	e11	78	31	33	41	34
10	e27	e26	e19	e16	e15	e14	e12	75	33	26	39	30
11	e26	e26	e19	e16	e15	e14	e12	54	32	23	46	30
12	e26	e26	e18	e16	e15	e14	e12	56	49	21	56	29
13	e27	e26	e18	e16	e15	e14	e12	77	41	21	47	28
14	e28	e26	e18	e16	e15	e14	e12	110	34	22	41	28
15	e30	e26	e18	e16	e15	e14	e12	98	31	20	39	26
16	e34	e26	e18	e16	e15	e14	e12	82	29	19	42	26
17	e36	e26	e18	e16	e15	e13	e12	44	28	23	44	26
18	e35	e26	e18	e16	e15	e13	e13	49	27	28	43	24
19	e34	e25	e17	e16	e15	e12	e14	88	27	22	39	24
20	e32	e25	e17	e16	e15	e12	e15	89	26	20	40	24
21	e31	e24	e17	e16	e15	e12	e16	70	24	20	44	24
22	e30	e24	e17	e16	e14	e11	e17	64	23	22	41	24
23	e30	e23	e17	e16	e14	e11	e19	67	22	22	46	23
24	e29	e23	e17	e16	e14	e11	e20	53	21	50	47	23
25	e29	e22	e17	e16	e14	e11	e22	42	21	52	39	23
26	e29	e22	e17	e16	e14	e11	e24	38	21	92	38	23
27	e29	e22	e17	e15	e14	e11	e27	42	21	144	36	23
28	e29	e21	e17	e15	e14	e11	e32	43	21	93	33	23
29	e28	e21	e16	e15	---	e11	e38	38	21	92	31	22
30	e28	e21	e16	e15	---	e11	e48	35	23	161	31	23
31	e28	---	e16	e15	---	e11	---	34	---	191	28	---
TOTAL	926	750	559	491	413	396	500	1841	905	1483	1543	844
MEAN	29.9	25.0	18.0	15.8	14.8	12.8	16.7	59.4	30.2	47.8	49.8	28.1
MAX	36	28	21	16	15	14	48	110	49	191	121	50
MIN	24	21	16	15	14	11	11	34	21	19	28	22
MED	29	26	18	16	15	14	12	54	30	23	43	26
AC-FT	1840	1490	1110	974	819	785	992	3650	1800	2940	3060	1670
CFSM	.62	.52	.37	.33	.31	.27	.35	1.23	.63	.99	1.03	.58
IN.	.72	.58	.43	.38	.32	.31	.39	1.42	.70	1.15	1.19	.65

e Estimated

15518080 LIGNITE CREEK ABOVE MOUTH NEAR HEALY--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2001, BY WATER YEAR (WY)#

MEAN	22.8	16.0	12.2	9.99	8.43	8.47	23.3	77.1	64.1	44.4	50.2	42.5
MAX	47.4	25.4	20.0	18.7	20.6	19.1	45.5	166	145	77.0	112	134
(WY)	1994	1994	1987	1995	1994	1994	1994	1992	1989	1986	2000	1990
MIN	10.3	4.87	1.65	.95	.000	.000	.000	40.1	30.2	25.6	22.7	17.6
(WY)	1988	1988	1988	1986	1986	1986	1986	1999	2001	1996	1999	1987

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1985 - 2001#	
ANNUAL TOTAL	14423.0		10651			
ANNUAL MEAN	39.4		29.2		31.3	
HIGHEST ANNUAL MEAN					43.6	
LOWEST ANNUAL MEAN					21.1	
HIGHEST DAILY MEAN	700	Aug 12	191	Jul 31	852	Jun 25 1989
LOWEST DAILY MEAN	a7.0	Jan 12	b11	Mar 22	c.00	Feb 1 1986
ANNUAL SEVEN-DAY MINIMUM	7.2	Jan 9	11	Mar 22	.00	Feb 1 1986
MAXIMUM PEAK FLOW			236	Jul 31	d2400	Aug 21 1986
MAXIMUM PEAK STAGE			3.48	Jul 31	f11.05	Aug 21 1986
MAXIMUM PEAK STAGE			g5.44	Apr 20		
ANNUAL RUNOFF (AC-FT)	28610		21130		22670	
ANNUAL RUNOFF (CFSM)	.82		.61		.65	
ANNUAL RUNOFF (INCHES)	11.15		8.24		8.84	
10 PERCENT EXCEEDS	96		49		68	
50 PERCENT EXCEEDS	25		23		20	
90 PERCENT EXCEEDS	8.0		14		5.0	

See Period of Record, partial years used in monthly statistics

a From Jan. 12 to 15

b From Mar. 22 to Apr. 9

c From Feb. 1 to Apr. 30, 1986

d Estimated discharge from rating curve extended above 280 ft³/s based on surface-float measurement at gage

e Estimated

f At site then in use, same datum

g Backwater from snow and ice

15518080 LIGNITE CREEK ABOVE MOUTH NEAR HEALY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1980 to 1981, 1986 to current year

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	STREAM WIDTH (FT) (00004)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM- PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)
MAY 16...	1903	32.0	3.24	93	10	3001	1.5	5430	1360	17	24	34	43
JUN 28...	2050	22.6	2.30	20	10	3001	17.5	106	5.8	--	--	--	--
JUL 27...	1157	45.0	3.32	150	10	3001	9.0	6660	2700	12	18	26	34
AUG 30...	1939	12.4	2.81	29	10	3001	21.0	53	4.2	--	--	--	--
DATE		SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70341)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM (70335)	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM (70336)					
MAY 16...		50	54	67	87	98	99	100					
JUN 28...		--	69	--	--	--	--	--					
JUL 27...		40	42	55	75	91	97	98					
AUG 30...		--	--	--	--	--	--	--					

15564879 SLATE CREEK AT COLDFOOT

LOCATION.--Lat 67°15'17", long 150°10'24", in NW¼ sec. 15, T. 28 N., R. 12 W. (Wiseman B-1 quad), Hydrologic Unit 19040601, on left bank 80 ft downstream from bridge on Dalton Highway, 1.1 mi upstream from mouth and 0.1 mi north of Coldfoot.

DRAINAGE AREA.--73.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Annual maximums, water years 1981-94. May 1995 to current year (no winter records in water years 1995-98).

REVISED RECORDS.--WRD AK-99-1: 1984(M), 1989(M), 1993(M), 1994(M), 1998 (M).

GAGE.--Water-stage recorder. Elevation of gage is 1050 ft above sea level, from topographic map. Prior to May 5, 1995, nonrecording gage at site 145 ft upstream at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e78	e16	e4.0	e.40	e.00	e.00	e.00	e.00	478	79	68	109
2	e74	e15	e3.8	e.40	e.00	e.00	e.00	e.00	599	71	68	102
3	e68	e15	e3.4	e.40	e.00	e.00	e.00	e.00	791	67	68	95
4	e64	e14	e3.2	e.40	e.00	e.00	e.00	e.00	797	65	65	92
5	e58	e14	e3.0	e.40	e.00	e.00	e.00	e.00	574	62	63	96
6	e56	e14	e2.8	e.40	e.00	e.00	e.00	e.20	738	62	61	95
7	e52	e13	e2.6	e.20	e.00	e.00	e.00	e.40	694	58	59	95
8	e48	e13	e2.4	e.20	e.00	e.00	e.00	e.80	526	54	57	94
9	e46	e12	e2.2	e.20	e.00	e.00	e.00	e1.0	487	51	61	94
10	e43	e12	e2.0	e.20	e.00	e.00	e.00	e1.5	559	51	104	93
11	e40	e12	e2.0	e.20	e.00	e.00	e.00	e2.0	409	51	155	91
12	e38	e11	e1.8	e.20	e.00	e.00	e.00	e3.0	293	60	191	90
13	e37	e11	e1.6	e.00	e.00	e.00	e.00	e4.0	257	61	347	88
14	e36	e11	e1.6	e.00	e.00	e.00	e.00	e6.0	224	68	1500	88
15	e35	e11	e1.4	e.00	e.00	e.00	e.00	e8.0	167	67	1300	99
16	e34	e10	e1.4	e.00	e.00	e.00	e.00	e12	152	60	780	121
17	e34	e10	e1.2	e.00	e.00	e.00	e.00	e16	156	63	463	117
18	e33	e10	e1.2	e.00	e.00	e.00	e.00	e24	158	67	277	113
19	e32	e9.8	e1.0	e.00	e.00	e.00	e.00	e40	154	61	222	106
20	e31	e9.0	e1.0	e.00	e.00	e.00	e.00	e60	128	67	195	102
21	e30	e8.6	e1.0	e.00	e.00	e.00	e.00	e85	116	87	176	99
22	e28	e7.8	e.80	e.00	e.00	e.00	e.00	e110	108	81	146	99
23	e26	e7.4	e.80	e.00	e.00	e.00	e.00	e140	102	71	128	96
24	e25	e6.6	e.80	e.00	e.00	e.00	e.00	e160	96	65	121	93
25	e24	e6.2	e.80	e.00	e.00	e.00	e.00	e190	91	61	115	89
26	e23	e5.8	e.60	e.00	e.00	e.00	e.00	e210	89	58	112	85
27	e21	e5.4	e.60	e.00	e.00	e.00	e.00	e240	81	54	107	84
28	e20	e5.0	e.60	e.00	e.00	e.00	e.00	e280	73	57	102	80
29	e19	e4.6	e.60	e.00	---	e.00	e.00	362	77	72	98	77
30	e18	e4.4	e.60	e.00	---	e.00	e.00	402	73	77	94	76
31	e17	---	e.60	e.00	---	e.00	---	403	---	72	93	---
TOTAL	1188	304.6	51.40	3.60	0.00	0.00	0.00	2760.90	9247	2000	7396	2858
MEAN	38.3	10.2	1.66	.12	.000	.000	.000	89.1	308	64.5	239	95.3
MAX	78	16	4.0	.40	.00	.00	.00	403	797	87	1500	121
MIN	17	4.4	.60	.00	.00	.00	.00	.00	73	51	57	76
AC-FT	2360	604	102	7.1	.00	.00	.00	5480	18340	3970	14670	5670
CFSM	.52	.14	.02	.00	.00	.00	.00	1.21	4.20	.88	3.25	1.30
IN.	.60	.15	.03	.00	.00	.00	.00	1.40	4.69	1.01	3.75	1.45

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2001, BY WATER YEAR (WY)#

	MEAN	45.5	16.1	9.27	5.42	3.83	3.08	4.34	208	207	101	209	152
MAX	88.5	30.0	17.3	12.1	9.07	7.13	9.32	378	308	184	435	212	
(WY)	1999	1999	1999	1999	1999	1999	1998	1998	2001	1995	1998	1998	
MIN	16.2	2.28	1.66	.12	.000	.000	.000	71.7	128	54.7	121	71.7	
(WY)	1997	1998	2001	2001	2001	2001	2001	2000	1997	1996	1996	1996	

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1995 - 2001#
ANNUAL TOTAL	23241.80	25809.50	
ANNUAL MEAN	63.5	70.7	73.5
HIGHEST ANNUAL MEAN			84.0
LOWEST ANNUAL MEAN			65.9
HIGHEST DAILY MEAN	802 Jun 7	1500 Aug 14	a2850 May 26 1998
LOWEST DAILY MEAN	b.60 Dec 26	c.00 Jan 13	c.00 Jan 13 2001
ANNUAL SEVEN-DAY MINIMUM	.63 Dec 25	.00 Jan 13	.00 Jan 13 2001
MAXIMUM PEAK FLOW		2510 Aug 14	d4930 May 26 1998
MAXIMUM PEAK STAGE		18.01 Aug 14	19.73 May 26 1998
ANNUAL RUNOFF (AC-FT)	46100	51190	53280
ANNUAL RUNOFF (CFSM)	.87	.96	1.00
ANNUAL RUNOFF (INCHES)	11.78	13.08	13.61
10 PERCENT EXCEEDS	138	154	249
50 PERCENT EXCEEDS	10	11	66
90 PERCENT EXCEEDS	2.0	.00	2.0

See Period of Record; partial years used in monthly summary statistics

a Revised in 1999 from 2740 ft³/s

b From Dec. 26 to 31

c From Jan. 13 to May 5

d From rating curve extended above 2,190 ft³/s on basis of slope-area measurement at discharge 4,700 ft³/s, gage height 19.6 ft

e Estimated

15564879 SLATE CREEK AT COLDFOOT--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1998 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: May 1998 to current year (seasonal).

INSTRUMENTATION.--Water-temperature recorder since May 11, 1998. Electronic water temperature recorder set for 1-hour recording interval.

REMARKS.--No record October 1 to May 27 due to probe frozen in ice. Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on June 21 and August 22. No variation was found within the cross section on both dates. The variation found between mean stream temperature and sensor temperature was less than 0.5°C.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum, 14.5°C, July 5 and 21, 1998; minimum, 0.0°C, on many days during spring break up and winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 14.0°C, July 23; minimum, 0.0°C, several days in May and June.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	STREAM WIDTH (FT) (000004)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (000009)	GAGE HEIGHT (FEET) (000065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (000061)	TEMPER- ATURE WATER (DEG C) (000010)	TEMPER- ATURE AIR (DEG C) (000020)
JUN							
21...	1437	54.0	16.0	14.14	118	9.5	22.0
21...	1439	54.0	24.0	14.14	118	9.5	22.0
21...	1441	54.0	32.0	14.14	118	9.5	22.0
21...	1443	54.0	40.0	14.14	118	9.5	22.0
21...	1445	54.0	48.0	14.14	118	9.5	22.0
AUG							
22...	2012	60.0	6.00	14.10	146	9.0	14.0
22...	2013	60.0	16.0	14.10	146	9.0	14.0
22...	2014	60.0	26.0	14.10	146	9.0	14.0
22...	2015	60.0	36.0	14.10	146	9.0	14.0
22...	2016	60.0	46.0	14.10	146	9.0	14.0
22...	2017	60.0	56.0	14.10	146	9.0	14.0

15564879 SLATE CREEK AT COLDFOOT--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	.0	---
28	---	---	---	---	---	---	---	---	---	2.0	.0	.5
29	---	---	---	---	---	---	---	---	---	2.0	.0	1.0
30	---	---	---	---	---	---	---	---	---	2.0	.0	.5
31	---	---	---	---	---	---	---	---	---	1.5	.0	.5
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	2.0	.0	1.0	12.5	6.5	9.5	10.0	6.0	8.0	9.5	7.0	8.0
2	2.0	.0	1.0	12.5	7.0	10.0	9.0	7.0	8.0	9.5	5.0	7.5
3	2.5	.0	1.0	13.0	6.5	10.0	10.0	6.0	8.0	9.5	6.0	7.5
4	1.5	.5	1.0	11.0	7.0	9.0	10.5	5.0	7.5	8.0	6.5	7.0
5	3.5	.5	2.0	9.0	7.0	8.0	9.5	7.0	8.0	8.0	6.5	7.0
6	3.5	1.0	2.5	9.0	6.0	7.5	8.5	6.5	7.5	7.5	5.5	6.5
7	6.0	1.5	3.5	8.5	6.0	7.0	8.0	7.0	7.5	8.0	5.0	6.5
8	5.0	1.5	3.5	9.5	5.5	7.0	10.5	6.5	8.0	7.5	5.5	6.0
9	4.0	2.0	3.0	9.5	6.0	7.5	9.0	8.0	8.5	6.5	5.5	6.0
10	7.0	1.5	4.0	9.5	5.5	7.5	10.0	7.5	8.5	7.0	3.0	5.0
11	7.5	2.0	4.5	9.0	6.5	7.5	8.5	6.5	7.5	7.5	4.0	5.5
12	7.0	2.0	4.5	11.0	7.0	8.5	7.5	6.5	7.0	7.0	3.5	5.5
13	8.0	2.5	5.5	11.5	7.0	9.0	8.0	6.0	7.0	6.5	3.5	5.0
14	6.0	2.5	4.5	11.0	7.5	9.5	6.5	6.0	6.5	6.0	4.0	5.0
15	8.5	2.0	5.0	12.0	7.0	9.5	6.0	5.0	5.5	6.0	5.0	5.5
16	10.0	2.5	6.0	13.0	7.5	10.5	8.0	4.5	6.0	6.5	4.0	5.0
17	10.5	3.5	7.0	11.5	9.0	10.0	7.5	3.5	5.5	6.0	2.5	4.0
18	11.0	3.5	7.5	10.5	7.5	9.0	6.0	4.5	5.0	5.5	2.0	4.0
19	10.5	4.0	7.5	11.5	7.0	9.5	8.0	4.5	6.0	5.5	2.0	3.5
20	11.0	3.5	7.0	12.5	8.5	10.0	10.0	5.5	7.0	5.0	2.0	3.5
21	10.5	4.5	7.5	13.5	8.5	10.5	9.0	6.0	7.5	5.5	1.5	3.5
22	10.0	5.5	7.5	13.5	8.0	10.5	10.0	6.5	8.0	5.5	2.0	3.5
23	12.5	5.5	9.0	14.0	9.0	11.5	10.0	5.5	7.5	5.0	3.0	3.5
24	13.0	6.0	9.5	13.0	9.0	10.5	9.5	4.5	7.0	4.0	1.0	2.5
25	13.5	6.0	9.5	11.0	8.5	9.5	9.0	5.0	7.0	3.5	.5	2.0
26	12.0	6.0	9.0	11.0	7.5	9.0	9.5	5.5	7.5	3.0	.5	2.0
27	9.0	6.5	7.0	10.0	6.5	8.5	9.5	4.5	7.0	3.5	2.0	2.5
28	10.0	5.5	7.5	9.0	7.5	8.0	10.5	5.5	8.0	3.0	.5	1.5
29	11.5	5.5	8.5	8.0	6.5	7.0	9.0	7.0	7.5	2.5	.5	1.5
30	13.0	7.0	9.5	11.5	5.5	8.0	9.0	6.0	7.5	2.0	1.0	1.5
31	---	---	---	11.0	6.5	9.0	8.5	7.0	8.0	---	---	---
MONTH	13.5	.0	5.5	14.0	5.5	9.0	10.5	3.5	7.3	9.5	.5	4.6

15565447 YUKON RIVER AT PILOT STATION

LOCATION.--Lat 61°56'04", long 162°52'50", in SW¹/₄ SE¹/₄ sec. 5, T.21 N., R.74 W. (Marshall D-3 quad), Hydrologic Unit 19040805, on the right bank, .2 mi downstream from village of Pilot Station, 2.4 mi downstream from Atchuelinguk River, and 19 mi upstream from Andreafsky River.

DRAINAGE AREA.--321,000 mi² approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to September 1996, April 1 to September 30, 2001.

REVISED RECORDS.--WRD-AK-99-1: 1998.

GAGE.--Water-stage recorder. Elevation of gage is 20 ft above sea level from topographic map.

REMARKS.--Records good, except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	e46000	e55000	e740000	815000	416000	466000
2	---	---	---	---	---	---	e46000	e60000	e760000	781000	416000	465000
3	---	---	---	---	---	---	e46000	e60000	e780000	746000	418000	459000
4	---	---	---	---	---	---	e46000	e65000	e800000	724000	423000	452000
5	---	---	---	---	---	---	e46000	e65000	e780000	704000	428000	445000
6	---	---	---	---	---	---	e46000	e70000	747000	680000	435000	438000
7	---	---	---	---	---	---	e46000	e75000	736000	656000	442000	429000
8	---	---	---	---	---	---	e46000	e80000	731000	631000	448000	417000
9	---	---	---	---	---	---	e46000	e85000	722000	609000	454000	406000
10	---	---	---	---	---	---	e46000	e90000	720000	588000	458000	396000
11	---	---	---	---	---	---	e46000	e95000	720000	567000	459000	387000
12	---	---	---	---	---	---	e46000	e100000	722000	546000	457000	379000
13	---	---	---	---	---	---	e46000	e110000	723000	525000	453000	373000
14	---	---	---	---	---	---	e46000	e120000	731000	506000	448000	366000
15	---	---	---	---	---	---	e46000	e130000	748000	488000	446000	360000
16	---	---	---	---	---	---	e46000	e140000	771000	471000	444000	355000
17	---	---	---	---	---	---	e46000	e150000	799000	461000	440000	352000
18	---	---	---	---	---	---	e46000	e160000	816000	458000	435000	348000
19	---	---	---	---	---	---	e48000	e180000	834000	454000	430000	343000
20	---	---	---	---	---	---	e48000	e200000	858000	453000	431000	e341000
21	---	---	---	---	---	---	e48000	e210000	865000	452000	426000	340000
22	---	---	---	---	---	---	e48000	e230000	858000	450000	423000	339000
23	---	---	---	---	---	---	e48000	e250000	854000	448000	425000	336000
24	---	---	---	---	---	---	e48000	e280000	865000	445000	431000	334000
25	---	---	---	---	---	---	e50000	e320000	873000	441000	437000	328000
26	---	---	---	---	---	---	e50000	e360000	875000	436000	443000	321000
27	---	---	---	---	---	---	e50000	e400000	e873000	430000	451000	314000
28	---	---	---	---	---	---	e50000	e440000	871000	425000	456000	309000
29	---	---	---	---	---	---	e55000	e500000	872000	422000	462000	304000
30	---	---	---	---	---	---	e55000	e580000	848000	419000	465000	298000
31	---	---	---	---	---	---	---	e680000	---	418000	467000	---
TOTAL	---	---	---	---	---	---	1426000	6340000	23892000	16649000	13667000	11200000
MEAN	---	---	---	---	---	---	47530	204500	796400	537100	440900	373300
MAX	---	---	---	---	---	---	55000	680000	875000	815000	467000	466000
MIN	---	---	---	---	---	---	46000	55000	720000	418000	416000	298000
AC-FT	---	---	---	---	---	---	2828000	12580000	47390000	33020000	27110000	22220000
CFSM	---	---	---	---	---	---	.15	.64	2.48	1.67	1.37	1.16
IN.	---	---	---	---	---	---	.17	.73	2.77	1.93	1.58	1.30

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2001, BY WATER YEAR (WY)#

	MEAN	254400	128300	76600	61980	53460	48430	46430	266900	584600	455300	398000	359400
MAX		335900	188800	94840	76000	65360	56770	55000	501700	844600	563500	515800	481300
(WY)		1991	1987	1986	1986	1994	1980	1989	1991	1985	1992	1981	1994
MIN		170600	72500	50000	50000	38380	35160	38430	100200	364400	314000	315000	252700
(WY)		1979	1989	1988	1988	1984	1984	1976	1985	1978	1996	1990	1976

SUMMARY STATISTICS

FOR 2001 WATER YEAR

WATER YEARS 1976 - 2001#

ANNUAL MEAN									227400				
HIGHEST ANNUAL MEAN									253700			1994	
LOWEST ANNUAL MEAN									185300			1978	
HIGHEST DAILY MEAN				875000		Jun 26			be1100000		Jun 5	1985	
LOWEST DAILY MEAN									c35000		Feb 23	1984	
ANNUAL SEVEN-DAY MINIMUM									35000		Feb 23	1984	
MAXIMUM PEAK FLOW		a901000				Jun 25			d1070000		Jun 9	1985	
MAXIMUM PEAK STAGE		a27.09				Jun 25			d27.50		Jun 9	1985	
MAXIMUM PEAK STAGE									f36.25		May 25	1989	
ANNUAL RUNOFF (AC-FT)									164700000				
ANNUAL RUNOFF (CFSM)									.71				
ANNUAL RUNOFF (INCHES)									9.63				
10 PERCENT EXCEEDS									510000				
50 PERCENT EXCEEDS									135000				
90 PERCENT EXCEEDS									48000				

See Period of Record, partial years used in monthly statistics

a Maximum recorded, but may have been higher during period of estimated discharge, Jun. 27

b Jun. 5-8, 1985

c From Feb. 23 to Mar. 27, 1984

d Maximum recorded, but may have been higher during period of estimated discharge, Jun. 5-8, 1985

e Estimated

f Backwater from ice

15565447 YUKON RIVER AT PILOT STATION--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CARBON- ATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LIVITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LIVITY WAT DIS FIX END FIELD CACO3 (MG/L) (39036)	SUL- FATE DIS- SOLVED (MG/L) AS SO4 (00945)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL (00940)	FLOU- RIDE DIS- SOLVED (MG/L) AS F (00950)	SIL- ICA, DIS- SOLVED (MG/L) AS SIO2 (00955)	SOL- IDS, RISI- DUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOL- IDS, SUM OF CON- STITU- ENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN NITRITE DIS- SOLVED (MG/L) AS N (00613)	NITRO- GEN NO2+NO3 DIS- SOLVED (MG/L) AS N (00631)	NITRO- GEN, AMMO- NIA DIS- SOLVED (MG/L) AS N (00608)
APR 19...	165	.0	135	140	27.1	1.3	E.1	11.4	200	185	.003	.206	.054
JUL 05...	82	.0	67	--	22.2	.7	E.1	5.6	131	105	.001	.048	.003
25...	93	.0	76	--	27.1	.9	E.1	6.2	129	118	.002	.068	.004
AUG 14...	88	.0	72	--	29.0	.9	.2	6.5	132	120	.001	.065	.006
30...	91	.0	75	77	29.4	.8	<.2	6.5	130	123	.001	.073	.005
SEP 21...	95	.0	78	80	29.8	.8	<.2	7.3	146	128	.002	.071	.004
DATE	NITRO- GEN, AMMO- NIA + ORGANIC TOTAL (MG/L) AS N (00625)	NITRO- GEN, AMMO- NIA + ORGANIC DIS. (MG/L) AS N (00623)	PHOS- PHORUS DIS- TOTAL (MG/L) AS P (00665)	PHOS- PHORUS DIS- SOLVED (MG/L) AS P (00666)	PHOS- PHORUS ORTH, DIS- SOLVED (MG/L) AS P (00671)	NITRO- GEN, TOTAL, SEDI- MENT SUSP, WEIGHT PERCENT (62845)	PHOS- SEDI- MENT SUSP. PERCENT (30292)	ALUMI- NUM SED, SUS PERCENT (30221)	ALUMI- NUM, DIS- SOLVED (UG/L) AS AL (01106)	ANTI- MONY SED. SUSP. (UG/G) (29816)	ARSENIC SED. SUSP. (UG/G) (29818)	ARSENIC DIS- SOLVED (UG/L) AS AS (01000)	BARIUM SED. SUSP. (UG/G) (29820)
APR 19...	.17	.15	.027	<.006	<.007	--	--	--	1	--	--	.4	--
JUL 05...	.59	.17	.338	.007	<.007	<.10	.09	6.6	13	1.4	12	1.0	910
25...	E.43	.13	E.312	.008	<.007	E.12	E.11	E7.5	13	E2.2	E19	.9	E950
AUG 14...	.57	.19	.508	E.005	E.004	.10	.1	7.7	15	2.1	19	.8	990
30...	.46	.20	.441	.006	<.007	.10	.09	7.5	14	1.7	17	.9	1000
SEP 21...	.41	.14	.257	E.005	<.007	.10	.1	7.3	11	1.5	17	.9	990
DATE	BAR- IUM, DIS- SOLVED (UG/L) AS BA (01005)	BERYL- LIUM SED. SUSP. (UG/G) (29822)	BERYL- LIUM DIS- SOLVED (UG/L) AS BE (01010)	BORON, DIS- SOLVED (UG/L) AS B (01020)	CAD- MIUM SED. SUSP. (UG/G) (29826)	CAD- MIUM DIS- SOLVED (UG/L) AS CD (01025)	CHRO- MIUM SED. SUSP. (UG/G) (29829)	CHRO- MIUM, DIS- SOLVED (UG/L) AS CR (01030)	COBALT SEDI- MENT SUSP. (UG/G) (35031)	COBALT DIS- SOLVED (UG/L) AS CO (01035)	COPPER SED. SUSP. (UG/G) (29832)	COP- PER, DIS- SOLVED (UG/L) AS CU (01040)	IRON SEDI- MENT SUSP. PERCENT (30269)
APR 19...	77.0	--	<.06	17	--	<.04	--	<.8	--	.20	--	1.0	--
JUL 05...	45.1	2	<.06	E6	.4	E.03	98	<.8	18	.10	35	2.9	3.9
25...	43.4	E2	<.06	9	E.5	E.02	E110	<.8	E20	.07	E46	2.4	E4.9
AUG 14...	47.4	2	<.06	20	.5	<.04	110	<.8	21	.08	47	3.9	4.9
30...	46.9	2	<.06	9	.6	<.04	110	<.8	19	.06	42	2.8	4.6
SEP 21...	43.8	2	<.06	9	.6	<.04	93	<.8	18	.09	46	2.3	4.5

15565447 YUKON RIVER AT PILOT STATION--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD SED. SUSP. (UG/G) (29836)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITH- IUM SEDI- MENT (UG/G) (35050)	LITH- IUM DIS- SOLVED (UG/L AS LI) (01130)	MAN- GANESE SED. (UG/G) (29839)	MAN- GANESE, DIS- SOLVED (UG/L AS MN) (01056)	MER- CURY SED. (UG/G) (29841)	MOLYB- DENUM SED. (UG/G) (29843)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/G) (29845)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM SED. (UG/G) (29847)
APR 19...	80	--	<.08	--	3.0	--	95.8	--	--	.9	--	.47	--
JUL 05...	170	12	.29	30	1.9	810	12.6	.09	2	.8	54	.82	M
JUL 25...	110	E15	.15	E34	2.5	E1000	3.5	E.06	E3	.9	E63	.43	M
AUG 14...	50	16	.20	32	2.7	950	2.9	.05	2	1.1	58	.74	M
AUG 30...	90	16	.20	33	2.5	860	4.1	.06	2	1.0	47	.25	M
SEP 21...	150	18	E.06	34	2.7	880	9.9	.06	2	.9	44	.33	M

DATE	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER SED. SUSP. (US/G) (29850)	SIL- VER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM SEDI- MENT (UG/G) (35040)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	THAL- LIUM SUS SED (UG/G) (49955)	TITA- NIUM SEDI- MENT SUSP. (UG/G) PERCENT (30317)	VANA- DIUM SED. SUSP. (UG/G) (29853)	VANA- DIUM DIS- SOLVED (UG/L AS V) (01085)	ZINC SED. SUSP. (UG/G) (29855)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URA- NIUM SEDI- MENT SUSP. (UG/G) (35046)	URA- NIUM NATU- RAL DIS- SOLVED (UG/L AS U) (22703)
APR 19...	.4	--	<1.0	--	205	--	--	--	1.0	--	2	--	1.01
JUL 05...	.4	M	<1.0	220	103	<50	.450	130	.7	110	<1	<50	.51
JUL 25...	.5	<.500000	<1.0	E280	115	<50	E.480	E150	.6	E130	<1	<50	.68
AUG 14...	<.3	<.500000	<1.0	280	121	<50	.470	150	.6	130	<1	<50	.77
AUG 30...	.6	<.500000	3.0	230	121	<50	.440	140	.6	120	1	<50	.70
SEP 21...	.5	<.500000	<1.0	230	130	<50	.440	130	.6	130	<1	<50	.77

DATE	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC PARTICU- LATE TOTAL (MG/L AS C) (00689)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON SED. SUSP. PERCENT (30244)	CARBON ORGANIC SUS- PENDED, TOTAL PERCENT (50465)	NITRO- GEN, PARTI- CULATE WAT FLT SUSP (MB/L AS N) (49570)	SEDI- MENT SUSP., FLOW- THROUGH CENTRIF (MG/L) (50279)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SEIVE DIAM. % FINER THAN .062 MM (70331)
APR 19...	2.2	<.1	.4	.5	--	--	<.022	--	4	512	--
JUL 05...	--	.2	6.1	6.3	1.3	1.1	.316	492	463	850000	67
JUL 25...	4.6	<.1	E6.0	E6.1	E2.0	E1.1	E.180	E296	--	--	--
AUG 14...	6.2	3.3	5.3	8.7	1.6	.9	.255	581	927	120000	82
AUG 30...	5.4	1.3	6.8	8.1	1.5	.9	.373	511	500	629000	85
SEP 21...	4.9	--	--	--	2.1	1.5	--	266	302	277000	81

15565700 UNALAKLEET RIVER ABOVE CHIROSKEY RIVER NEAR UNALAKLEET

LOCATION.--Lat 63°56'06", long 160°18'18", in NW¼ NE¼ sec. 18, T.18 S., R.8 W. (Unalakleet D-3 quad), Hydrologic Unit 19050102, on the right bank, 3.5 mi upstream from mouth of the Chiroskey River, 28 mi upstream from mouth, 15 mi east of Unalakleet.

DRAINAGE AREA.--1,048 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1997 to September 1999 (no winter record), October 1999 to current year.

REVISED RECORDS.--WRD-AK-99-1: 1998.

GAGE.--Water-stage recorder. Elevation of gage is 40 ft above sea level from topographic map.

REMARKS.--Records good, except for June 2 to June 12 which are fair, and estimated daily discharges, which are poor. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2240	e900	e380	e220	e130	e100	e95	e130	6490	2370	1810	1890
2	2060	e850	e360	e210	e130	e100	e95	e140	7970	2240	1730	1910
3	e1900	e800	e340	e200	e130	e100	e95	e140	9630	2160	1670	1780
4	e1850	e800	e320	e190	e120	e100	e95	e140	11500	2390	1590	1770
5	e1800	e750	e320	e180	e120	e100	e95	e150	13300	2420	1520	1940
6	e1700	e750	e320	e170	e120	e100	e95	e150	15200	2220	1460	2900
7	e1600	e750	e320	e170	e120	e100	e95	e150	17900	2060	1420	5130
8	e1550	e750	e300	e160	e120	e100	e95	e160	19600	1950	1380	4900
9	e1500	e750	e300	e160	e120	e100	e95	e160	19300	1850	1410	4160
10	e1450	e800	e300	e160	e120	e100	e95	e160	17700	1810	1790	3600
11	e1400	e800	e300	e160	e120	e100	e100	e190	15400	1870	1870	3190
12	e1500	e800	e290	e150	e120	e100	e100	e230	13100	1970	1810	2890
13	e1700	e800	e290	e150	e120	e100	e100	e280	11300	2140	1800	2660
14	e2100	e800	e290	e150	e120	e100	e100	e360	9610	2250	2100	2450
15	e2300	e750	e280	e150	e120	e100	e100	e500	8500	2170	2810	2290
16	e2000	e750	e280	e150	e110	e100	e100	667	7360	2220	3310	2170
17	e1800	e750	e270	e150	e110	e100	e100	1040	6490	2790	3410	2050
18	e1500	e750	e270	e140	e110	e100	e100	1430	6150	2880	3180	1960
19	e1300	e700	e260	e140	e110	e100	e100	1600	5940	2770	3090	1880
20	e1200	e650	e260	e140	e110	e100	e100	1580	5680	3770	3150	1810
21	e1100	e650	e250	e140	e110	e95	e110	1590	5150	4290	3570	1740
22	e1000	e600	e250	e140	e110	e95	e110	1730	4590	3760	3340	1670
23	e1000	e600	e250	e140	e110	e95	e110	1870	4180	3280	3070	1610
24	e1000	e550	e240	e140	e110	e95	e110	1860	3940	2960	2840	1550
25	e1000	e500	e240	e130	e110	e95	e120	1940	3620	2720	2620	1490
26	e1000	e480	e240	e130	e110	e95	e120	1920	3280	2500	2430	1450
27	e1100	e460	e230	e130	e110	e95	e120	1900	2980	2370	2270	1420
28	e1100	e440	e230	e130	e110	e95	e130	2210	2760	2240	2140	1400
29	e1000	e420	e230	e130	---	e95	e130	2930	2560	2120	2040	1350
30	e950	e400	e220	e130	---	e95	e130	4120	2450	2020	1940	1300
31	e900	---	e220	e130	---	e95	---	5210	---	1920	1850	---
TOTAL	45600	20550	8650	4770	3260	3045	3140	36637	263630	76480	70420	68310
MEAN	1471	685	279	154	116	98.2	105	1182	8788	2467	2272	2277
MAX	2300	900	380	220	130	100	130	5210	19600	4290	3570	5130
MIN	900	400	220	130	110	95	95	130	2450	1810	1380	1300
AC-FT	90450	40760	17160	9460	6470	6040	6230	72670	522900	151700	139700	135500
CFSM	1.40	.65	.27	.15	.11	.09	.10	1.13	8.39	2.35	2.17	2.17
IN.	1.62	.73	.31	.17	.12	.11	.11	1.30	9.36	2.71	2.50	2.42

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2001, BY WATER YEAR (WY)#

	1997	1998	1999	2000	2001
MEAN	1317	586	266	154	118
MAX	1471	685	279	154	120
(WY)	2001	2001	2001	2000	2000
MIN	1163	487	252	154	116
(WY)	2000	2000	2000	2000	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1997 - 2001
ANNUAL TOTAL	489924	604492	
ANNUAL MEAN	1339	1656	1475
HIGHEST ANNUAL MEAN			1656
LOWEST ANNUAL MEAN			1294
HIGHEST DAILY MEAN	6880	19600	19600
LOWEST DAILY MEAN	a100	b95	b95
ANNUAL SEVEN-DAY MINIMUM	100	95	95
MAXIMUM PEAK FLOW		19700	c19700
MAXIMUM PEAK STAGE		98.41	98.41
ANNUAL RUNOFF (AC-FT)	971800	1199000	1068000
ANNUAL RUNOFF (CFSM)	1.28	1.58	1.41
ANNUAL RUNOFF (INCHES)	17.39	21.46	19.12
10 PERCENT EXCEEDS	3490	3370	4170
50 PERCENT EXCEEDS	750	750	1420
90 PERCENT EXCEEDS	110	100	110

See Period of Record, partial years used in monthly statistics
a From Mar. 25 to Apr. 10
b From Mar. 21 to Apr. 10
c From rating curve extended above 8800 ft³/s
e Estimated

WATER-QUALITY RECORDS

WATER TEMPERATURE: Maximum, 11.5°C, July 9; minimum, 0.0°C, many days during winter and spring breakup periods.

DATE	TIME	STREAM WIDTH (FT) (000004)	SAMPLE LOC- ATION, CROSS	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)
			SECTION		FEET		
			(FT FM R BK) (72103)		PER SECOND (00061)		
SEP							
05...	1301	245	23.0	88.28	1940	7.5	11.0
05...	1303	245	45.0	88.28	1940	7.5	11.0
05...	1305	245	80.0	88.28	1940	7.5	11.0
05...	1307	245	130.0	88.28	1940	7.5	11.0
05...	1309	245	205.0	88.28	1940	7.5	11.0

[illegible]

15565700 UNALAKLEET RIVER ABOVE CHIROSKEY RIVER NEAR UNALAKLEET—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0
13	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.5	.5	.5
14	.0	.0	.0	.0	.0	.0	.0	.0	.0	5.0	1.5	3.0
15	.0	.0	.0	.0	.0	.0	.0	.0	.0	6.5	4.0	5.0
16	.0	.0	.0	.0	.0	.0	.0	.0	.0	6.0	4.0	5.0
17	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.5	2.5	3.5
18	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.5	1.5	2.0
19	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.0	1.0	1.5
20	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.5	.5	1.5
21	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.5	1.5	2.5
22	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.0	2.0	2.5
23	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.5	1.5	2.0
24	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.5	2.0	2.5
25	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.5	1.5	2.0
26	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.5	1.0	2.0
27	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.5	2.0	2.5
28	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.5	3.0	3.5
29	---	---	---	.0	.0	.0	.0	.0	.0	3.5	2.5	3.0
30	---	---	---	.0	.0	.0	.0	.0	.0	3.5	2.0	2.5
31	---	---	---	.0	.0	.0	---	---	---	2.5	2.0	2.5
MONTH	.0	.0	.0	.0	.0	.0	.0	.0	.0	6.5	.0	1.6

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	3.5	2.5	3.0	9.0	8.0	8.5	9.5	8.5	9.0	8.5	7.5	8.0
2	4.5	3.0	3.5	9.5	8.0	8.5	9.0	8.0	8.5	8.5	8.0	8.0
3	4.5	3.0	4.0	9.0	9.0	9.0	8.5	7.5	8.0	8.0	7.5	8.0
4	5.0	3.5	4.0	9.0	8.0	8.0	8.5	7.5	8.0	8.0	7.0	7.5
5	4.5	3.5	4.0	8.0	7.5	7.5	8.5	7.5	8.0	7.5	7.5	7.5
6	5.0	4.5	5.0	9.0	6.5	7.5	8.0	7.5	8.0	7.5	6.5	7.0
7	5.5	5.0	5.0	10.0	8.0	9.0	9.0	8.0	8.5	7.0	6.5	6.5
8	5.5	5.0	5.5	10.5	9.0	9.5	9.5	8.5	9.0	6.5	6.5	6.5
9	5.0	4.0	4.5	11.5	9.5	10.5	9.0	9.0	9.0	7.0	6.5	6.5
10	4.5	4.0	4.0	11.0	9.5	10.0	9.0	8.5	9.0	7.0	6.5	6.5
11	5.5	4.0	4.5	9.5	8.5	9.0	8.5	8.0	8.5	6.5	6.0	6.5
12	6.0	5.0	5.5	8.5	8.0	8.5	9.0	8.0	8.5	6.5	5.5	6.0
13	5.5	4.0	5.0	9.0	8.0	8.5	9.0	8.5	9.0	6.0	5.0	5.5
14	4.5	3.5	4.0	9.5	8.5	9.0	9.0	8.5	8.5	6.0	5.5	6.0
15	5.0	4.5	5.0	9.5	9.0	9.5	9.0	8.0	8.5	6.0	5.5	5.5
16	5.5	4.0	4.5	9.5	8.5	9.0	8.5	8.0	8.0	6.0	5.0	5.5
17	6.5	5.5	6.0	9.0	8.5	8.5	8.5	7.5	8.0	6.0	5.5	5.5
18	7.0	6.5	7.0	9.5	8.0	8.5	7.5	7.0	7.5	6.0	5.5	6.0
19	8.0	7.0	7.5	9.5	9.0	9.5	7.5	7.0	7.0	6.0	5.5	6.0
20	8.0	8.0	8.0	9.5	9.0	9.0	8.0	7.0	7.5	7.0	6.0	6.5
21	8.5	8.0	8.0	9.5	9.0	9.5	8.5	7.5	8.0	7.0	6.0	6.5
22	9.0	8.5	8.5	9.5	9.0	9.5	8.5	7.5	8.0	6.5	5.5	6.0
23	10.0	9.0	9.5	9.0	8.5	9.0	8.5	8.0	8.0	6.0	5.0	5.5
24	9.5	8.5	9.5	8.5	8.0	8.0	8.5	8.0	8.5	5.5	5.0	5.5
25	9.0	8.0	8.5	8.5	7.5	8.0	9.0	8.0	8.5	5.5	5.0	5.0
26	8.0	7.0	7.5	8.5	8.0	8.0	8.5	8.0	8.0	5.5	5.0	5.0
27	7.0	6.5	7.0	8.0	7.5	8.0	9.0	8.0	8.0	5.5	5.0	5.0
28	9.0	7.0	8.0	8.5	7.5	8.0	9.0	8.5	8.5	5.5	4.5	5.0
29	10.5	9.0	10.0	8.0	7.5	8.0	9.0	8.5	8.5	5.0	3.5	4.0
30	10.0	9.0	9.5	9.0	7.5	8.0	9.0	8.0	8.5	3.5	3.0	3.5
31	---	---	---	10.0	8.0	9.0	8.0	7.5	7.5	---	---	---
MONTH	10.5	2.5	6.2	11.5	6.5	8.7	9.5	7.0	8.3	8.5	3.0	6.1

15743850 DAHL CREEK NEAR KOBUK

LOCATION.--Lat 66°56'46", long 156°54'32", in NW¼ SE¼ sec. 21, T. 18 N., R. 9 E. (Shungnak D-2 quad), Hydrologic Unit 19050302, on right bank 25 ft downstream from culvert on road to Bornite at west end of Dahl Creek landing strip, 3.5 mi upstream from mouth and 3 mi north of Kobuk.

DRAINAGE AREA.--11.0 mi².

PERIOD OF RECORD.--Annual maximum, water years 1986-87, April 1988 to current year. (No winter record in water years 1989, 1991-92, 1994, and 1996.)

REVISED RECORDS.--WDR AK-88-1: 1986(M).

GAGE.--Water-stage recorder. Elevation of gage is 225 ft above sea level, from topographic map. July 16, 1986, to April 28, 1988, the water-stage recorder was operated to obtain annual maximums. Prior to August 17, 1994 at site 50 ft upstream at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	e10	e5.0	e3.6	e3.2	e3.0	e3.0	e2.9	46	39	52	45
2	54	e9.5	e5.0	e3.6	e3.2	e3.0	e3.0	e2.9	57	38	55	43
3	54	e9.5	e5.0	e3.6	e3.2	e3.0	e3.0	e2.9	83	36	51	41
4	51	e9.0	e5.0	e3.6	e3.2	e3.0	e3.0	e2.9	120	40	49	42
5	e45	e9.0	e4.8	e3.6	e3.2	e3.0	e3.0	e2.9	138	36	47	41
6	e40	e8.5	e4.8	e3.6	e3.2	e3.0	e3.0	e2.9	155	33	45	38
7	e36	e8.5	e4.6	e3.6	e3.2	e3.0	e3.0	e2.9	171	32	43	38
8	e32	e8.0	e4.6	e3.4	e3.2	e3.0	e3.0	e2.9	170	31	42	38
9	e30	e8.0	e4.6	e3.4	e3.2	e3.0	e3.0	e2.9	150	31	51	39
10	e28	e8.0	e4.4	e3.4	e3.2	e3.0	e3.0	e2.9	135	30	109	37
11	e26	e7.5	e4.4	e3.4	e3.2	e3.0	e3.0	e2.9	110	30	102	36
12	e24	e7.5	e4.4	e3.4	e3.2	e3.0	e3.0	e2.9	108	41	141	36
13	e23	e7.5	e4.4	e3.4	e3.2	e3.0	e3.0	e2.9	99	37	200	35
14	e21	e7.0	e4.2	e3.4	e3.2	e3.0	e3.0	e3.0	141	34	449	34
15	e20	e7.0	e4.2	e3.4	e3.0	e3.0	e3.0	e3.2	97	34	266	35
16	e19	e7.0	e4.2	e3.4	e3.0	e3.0	e3.0	e3.2	83	35	206	34
17	e18	e6.5	e4.2	e3.4	e3.0	e3.0	e3.0	e3.4	83	37	174	33
18	e17	e6.5	e4.0	e3.4	e3.0	e3.0	e3.0	e3.4	87	35	151	33
19	e16	e6.5	e4.0	e3.4	e3.0	e3.0	e2.9	e3.4	82	47	138	32
20	e16	e6.5	e4.0	e3.4	e3.0	e3.0	e2.9	e3.2	74	80	121	32
21	e15	e6.0	e4.0	e3.4	e3.0	e3.0	e2.9	e3.2	70	63	107	31
22	e15	e6.0	e3.8	e3.2	e3.0	e3.0	e2.9	e3.2	64	60	96	31
23	e14	e6.0	e3.8	e3.2	e3.0	e3.0	e2.9	e3.2	60	58	86	30
24	e14	e6.0	e3.8	e3.2	e3.0	e3.0	e2.9	e3.2	58	55	77	30
25	e13	e5.5	e3.8	e3.2	e3.0	e3.0	e2.9	e3.2	54	51	72	29
26	e13	e5.5	e3.8	e3.2	e3.0	e3.0	e2.9	e5.0	50	48	67	29
27	e12	e5.5	e3.8	e3.2	e3.0	e3.0	e2.9	e8.0	46	47	61	28
28	e12	e5.5	e3.8	e3.2	e3.0	e3.0	e2.9	e15	43	57	57	27
29	e11	e5.5	e3.8	e3.2	---	e3.0	e2.9	e24	41	60	53	27
30	e11	e5.0	e3.6	e3.2	---	e3.0	e2.9	29	39	56	50	26
31	e10	---	e3.6	e3.2	---	e3.0	---	35	---	53	48	---
TOTAL	767	214.0	131.4	104.8	86.8	93.0	88.8	192.5	2714	1364	3266	1030
MEAN	24.7	7.13	4.24	3.38	3.10	3.00	2.96	6.21	90.5	44.0	105	34.3
MAX	57	10	5.0	3.6	3.2	3.0	3.0	35	171	80	449	45
MIN	10	5.0	3.6	3.2	3.0	3.0	2.9	2.9	39	30	42	26
AC-FT	1520	424	261	208	172	184	176	382	5380	2710	6480	2040
CFSM	2.25	.65	.39	.31	.28	.27	.27	.56	8.22	4.00	9.58	3.12
IN.	2.59	.72	.44	.35	.29	.31	.30	.65	9.18	4.61	11.05	3.48

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2001, BY WATER YEAR (WY)#

	MEAN	28.8	9.12	5.59	4.53	4.07	3.76	4.23	52.5	64.7	36.4	70.3	50.5
MAX	67.2	16.0	8.17	6.88	6.15	5.63	7.39	93.1	116	73.2	223	104	
(WY)	1994	1999	1998	1998	1998	1998	1997	1996	1992	1989	1994	1993	
MIN	9.65	3.70	2.55	2.00	2.00	1.63	1.50	6.21	13.1	10.6	17.3	19.8	
(WY)	1993	1993	1993	1993	1993	1993	1993	2001	1997	1997	1990	1991	

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR			FOR 2001 WATER YEAR			WATER YEARS 1986 - 2001		
ANNUAL TOTAL	7458.6			10052.3					
ANNUAL MEAN	20.4			27.5			25.4		
HIGHEST ANNUAL MEAN							36.7		
LOWEST ANNUAL MEAN							18.8		
HIGHEST DAILY MEAN	181	Jun	3	449	Aug	14	1400	Aug	17 1994
LOWEST DAILY MEAN	a3.6	Dec	30	b2.9	Apr	19	c1.5	Mar	9 1993
ANNUAL SEVEN-DAY MINIMUM	3.7	Dec	25	2.9	Apr	19	1.5	Mar	9 1993
MAXIMUM PEAK FLOW				765	Aug	14	d1840	Aug	17 1994
MAXIMUM PEAK STAGE				6.16	Aug	14	6.73	Aug	17 1994
MAXIMUM PEAK STAGE				f6.62	Nov	7			
ANNUAL RUNOFF (AC-FT)	14790			19940			18380		
ANNUAL RUNOFF (CFSM)	1.85			2.50			2.31		
ANNUAL RUNOFF (INCHES)	25.22			34.00			31.34		
10 PERCENT EXCEEDS	63			68			83		
50 PERCENT EXCEEDS	7.0			5.5			20		
90 PERCENT EXCEEDS	4.8			3.0			3.0		

See Period of Record; partial years used in monthly statistics

a From Dec. 30 to 31

b From Apr. 19 to May 13

c From Mar. 9 to Apr. 30, 1993

d From rating curve extended above 170 ft³/s on basis of slope-area measurement of peak flow

e Estimated

f Backwater from ice

15744500 KOBUK RIVER NEAR KIANA

LOCATION.--Lat 66°58'25", long 160°07'51", in NW¼ SE¼ sec. 11, T. 18 N., R. 7 W. (Selawik D-3 quad), Northwest Arctic Borough, Hydrologic Unit 19050304, on left bank, 5.8 mi upstream from Portage Creek, 9.7 mi upstream from Squirrel River, and 7.8 mi east of Kiana.

DRAINAGE AREA.--9,520 mi², approximately.

PERIOD OF RECORD.--September 1976 to current year.

REVISED RECORDS.--WDR AK-81-1: 1977 (M), 1978, 1979-80 (M), WDR AK-93-1: 1992.

GAGE.--Water-stage recorder. Elevation of gage is 35 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. GOES Satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e22000	e10000	e5500	e3800	e3000	e2500	e2100	e1900	e17000	36400	27500	21800
2	e22000	e10000	e5500	e3800	e3000	e2500	e2100	e1900	e24000	34200	26400	21000
3	e21000	e9500	e5500	e3800	e3000	e2500	e2100	e1900	e34000	32600	25300	20500
4	e21000	e9500	e5500	e3800	e3000	e2400	e2100	e1900	e50000	32100	24000	20300
5	e21000	e9000	e5000	e3800	e2900	e2400	e2100	e1900	e75000	32200	23000	21200
6	e20000	e9000	e5000	e3600	e2900	e2400	e2100	e1900	e100000	30200	21900	22900
7	e20000	e8500	e5000	e3600	e2900	e2400	e2100	e1900	e115000	28100	20900	23100
8	e20000	e8500	e5000	e3600	e2900	e2400	e2000	e1900	e125000	26400	19900	23100
9	e19000	e8000	e5000	e3600	e2800	e2400	e2000	e1900	e130000	24800	19500	24300
10	e19000	e8000	e4800	e3600	e2800	e2300	e2000	e1900	e130000	23200	20100	25200
11	e18000	e8000	e4800	e3600	e2800	e2300	e2000	e1900	e130000	21900	23800	25300
12	e18000	e7500	e4800	e3400	e2800	e2300	e2000	e1900	e125000	21500	29700	24600
13	e17000	e7500	e4600	e3400	e2800	e2300	e2000	e1900	e120000	21900	38500	23600
14	e17000	e7500	e4600	e3400	e2700	e2300	e2000	e1900	e110000	22300	52400	22500
15	e16000	e7000	e4600	e3400	e2700	e2300	e2000	e2000	100000	23200	75500	21300
16	e16000	e7000	e4600	e3400	e2700	e2200	e2000	e2000	86200	25200	80300	20500
17	e16000	e7000	e4400	e3400	e2700	e2200	e2000	e2000	74700	28100	73800	20100
18	e15000	e7000	e4400	e3400	e2700	e2200	e2000	e2000	71700	31600	66600	20000
19	e15000	e6500	e4400	e3400	e2700	e2200	e2000	e2000	71000	31100	58500	19500
20	e15000	e6500	e4400	e3200	e2600	e2200	e2000	e2000	69100	35700	51900	18800
21	e14000	e6500	e4200	e3200	e2600	e2200	e1900	e2000	64900	47600	46300	18300
22	e14000	e6500	e4200	e3200	e2600	e2200	e1900	e2000	63300	45100	41600	17800
23	e13000	e6000	e4200	e3200	e2600	e2200	e1900	e2000	59100	43300	38000	17300
24	e13000	e6000	e4200	e3200	e2600	e2200	e1900	e2000	58100	43400	35000	16800
25	e12000	e6000	e4200	e3200	e2600	e2200	e1900	e2200	58800	39400	32200	16400
26	e12000	e6000	e4000	e3200	e2500	e2100	e1900	e2700	54500	34100	29900	15700
27	e11000	e6000	e4000	e3200	e2500	e2100	e1900	e3400	48500	30400	28000	15300
28	e11000	e5500	e4000	e3000	e2500	e2100	e1900	e4600	44500	28500	26300	15200
29	e11000	e5500	e4000	e3000	---	e2100	e1900	e6500	41500	29100	24900	15100
30	e10000	e5500	e4000	e3000	---	e2100	e1900	e9000	38800	29700	23700	14700
31	e10000	---	e3800	e3000	---	e2100	---	e12000	---	28900	22800	---
TOTAL	499000	221000	142200	105400	76900	70300	59700	87000	2289700	962200	1128200	602200
MEAN	16100	7367	4587	3400	2746	2268	1990	2806	76320	31040	36390	20070
MAX	22000	10000	5500	3800	3000	2500	2100	12000	130000	47600	80300	25300
MIN	10000	5500	3800	3000	2500	2100	1900	1900	17000	21500	19500	14700
AC-FT	989800	438400	282100	209100	152500	139400	118400	172600	4542000	1909000	2238000	1194000
CFSM	1.69	.77	.48	.36	.29	.24	.21	.29	8.02	3.26	3.82	2.11
IN.	1.95	.86	.56	.41	.30	.27	.23	.34	8.95	3.76	4.41	2.35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2001, BY WATER YEAR (WY)#

	MEAN	13900	5455	3453	2620	2157	1902	1856	24050	46820	21400	31170	28370
MAX	29870	11050	6097	3965	2868	2600	3703	48430	87010	40130	78210	78190	
(WY)	1994	1994	1994	1994	1994	1980	1980	1979	1989	1980	1994	1986	
MIN	5003	2750	1926	1606	1331	1116	1000	1635	19690	9032	9284	9542	
(WY)	1997	1981	1982	1982	1984	1984	1984	1992	1997	1997	1990	1996	

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1976 - 2001#
ANNUAL TOTAL	4997340	6243800	
ANNUAL MEAN	13650	17110	15360
HIGHEST ANNUAL MEAN			24960
LOWEST ANNUAL MEAN			10020
HIGHEST DAILY MEAN			155000
LOWEST DAILY MEAN	127000	a130000	d1000
ANNUAL SEVEN-DAY MINIMUM	b1600	c1900	1000
MAXIMUM PEAK FLOW	1600	1900	161000
MAXIMUM PEAK STAGE		f	g62.94
MAXIMUM PEAK STAGE		gh61.40	h64.26
ANNUAL RUNOFF (AC-FT)	9912000	12380000	11130000
ANNUAL RUNOFF (CFSM)	1.43	1.80	1.61
ANNUAL RUNOFF (INCHES)	19.53	24.40	21.92
10 PERCENT EXCEEDS	32300	43300	41400
50 PERCENT EXCEEDS	5750	6000	5400
90 PERCENT EXCEEDS	1670	2000	1700

See Period of Record; partial years used in monthly statistics

a From Jun. 9-11

b From Apr. 6 to May 11

c From Apr. 21 to May 14

d From Apr. 1 to May 14, 1984

e Estimated

f Not determined, see Highest Daily Mean Discharge

g From flood marks

h Backwater from ice

15746900 WULIK RIVER ABOVE FERRIC CREEK NEAR KIVALINA

LOCATION.--Lat 68°04'42", long 163°11'15", in NW¹/₄ sec. 23, T. 31 N., R. 20 W. (DeLong Mts A-2 quad), Northwest Arctic Borough, Hydrologic Unit 19050404, on left bank 0.7 mi upstream from Ferric Creek, 9 miles west of Red Dog Mine site, and 43 miles northeast of Kivalina.

DRAINAGE AREA.--191 mi².

PERIOD OF RECORD.-- July 2000 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 500 ft above sea level, from topographic map.

EXTREMES FOR Water year 2000-- Maximum discharge for period July through September, 2000, 5440 ft³/s September 2, gage height 53.05 ft; minimum not determined, occurs during the winter.

REMARKS.--Records good except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	e160	839	1020
2	---	---	---	---	---	---	---	---	---	e250	1830	4360
3	---	---	---	---	---	---	---	---	---	e330	1420	3200
4	---	---	---	---	---	---	---	---	---	290	2420	3590
5	---	---	---	---	---	---	---	---	---	258	3470	4420
6	---	---	---	---	---	---	---	---	---	220	2030	2900
7	---	---	---	---	---	---	---	---	---	203	1630	1660
8	---	---	---	---	---	---	---	---	---	181	1470	1120
9	---	---	---	---	---	---	---	---	---	166	1290	833
10	---	---	---	---	---	---	---	---	---	154	2230	646
11	---	---	---	---	---	---	---	---	---	142	1860	520
12	---	---	---	---	---	---	---	---	---	131	1680	426
13	---	---	---	---	---	---	---	---	---	118	1790	353
14	---	---	---	---	---	---	---	---	---	109	1490	335
15	---	---	---	---	---	---	---	---	---	114	1020	271
16	---	---	---	---	---	---	---	---	---	297	788	246
17	---	---	---	---	---	---	---	---	---	594	1080	176
18	---	---	---	---	---	---	---	---	---	1470	1190	206
19	---	---	---	---	---	---	---	---	---	669	1070	171
20	---	---	---	---	---	---	---	---	---	443	869	167
21	---	---	---	---	---	---	---	---	---	341	702	186
22	---	---	---	---	---	---	---	---	---	276	573	e200
23	---	---	---	---	---	---	---	---	---	259	474	e180
24	---	---	---	---	---	---	---	---	---	221	401	e160
25	---	---	---	---	---	---	---	---	---	206	341	e140
26	---	---	---	---	---	---	---	---	---	240	297	e130
27	---	---	---	---	---	---	---	---	---	263	265	e120
28	---	---	---	---	---	---	---	---	---	240	262	e110
29	---	---	---	---	---	---	---	---	---	310	242	e100
30	---	---	---	---	---	---	---	---	---	527	222	e90
31	---	---	---	---	---	---	---	---	---	578	319	---
TOTAL	---	---	---	---	---	---	---	---	---	9760	35564	28036
MEAN	---	---	---	---	---	---	---	---	---	315	1147	935
MAX	---	---	---	---	---	---	---	---	---	1470	3470	4420
MIN	---	---	---	---	---	---	---	---	---	109	222	90
MED	---	---	---	---	---	---	---	---	---	250	1070	258
AC-FT	---	---	---	---	---	---	---	---	---	19360	70540	55610
CFSM	---	---	---	---	---	---	---	---	---	1.65	6.01	4.89
IN.	---	---	---	---	---	---	---	---	---	1.90	6.93	5.46

e Estimated

15746900 WULIK RIVER ABOVE FERRIC CREEK NEAR KIVALINA--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e85	e32	e20	e7.0	e4.2	e3.2	e2.7	e2.3	e320	658	570	176
2	e80	e32	e19	e7.0	e4.2	e3.2	e2.7	e2.3	e500	677	947	169
3	e75	e32	e18	e7.0	e4.2	e3.2	e2.7	e2.3	e800	621	814	167
4	e70	e32	e17	e6.5	e4.2	e3.2	e2.6	e2.3	e1200	646	653	184
5	e65	e30	e16	e6.5	e4.0	e3.2	e2.6	e2.3	e1800	544	536	250
6	e60	e30	e15	e6.5	e4.0	e3.2	e2.6	e2.3	e2600	412	446	e360
7	e60	e30	e15	e6.5	e4.0	e3.2	e2.6	e2.3	e3000	351	412	e460
8	e60	e30	e14	e6.0	e4.0	e3.2	e2.6	e2.3	3200	339	613	e500
9	e55	e30	e14	e6.0	e4.0	e3.2	e2.6	e2.3	3300	299	2090	e800
10	e55	e30	e13	e6.0	e3.8	e3.0	e2.6	e2.3	2450	263	1510	e1400
11	e55	e32	e13	e6.0	e3.8	e3.0	e2.6	e2.2	2040	288	1460	e1250
12	e50	e32	e12	e5.5	e3.8	e3.0	e2.5	e2.2	2960	296	3750	1070
13	e50	e32	e12	e5.5	e3.8	e3.0	e2.5	e2.2	2990	308	4840	776
14	e50	e32	e12	e5.5	e3.8	e3.0	e2.5	e2.2	1860	289	3090	618
15	e48	e32	e11	e5.5	e3.6	e3.0	e2.5	e2.2	1070	262	1670	532
16	e48	e32	e11	e5.5	e3.6	e2.9	e2.5	e2.2	939	403	1110	479
17	e46	e32	e11	e5.0	e3.6	e2.9	e2.5	e2.3	1080	1080	846	415
18	e44	e32	e10	e5.0	e3.6	e2.9	e2.5	e2.5	1770	1390	671	370
19	e42	e32	e10	e5.0	e3.6	e2.9	e2.5	e2.7	1830	801	554	334
20	e42	e32	e9.5	e5.0	e3.6	e2.9	e2.5	e3.1	1200	765	515	310
21	e40	e30	e9.5	e5.0	e3.4	e2.9	e2.5	e3.8	1370	684	446	286
22	e40	e30	e9.0	e4.8	e3.4	e2.8	e2.4	e5.0	1060	570	398	259
23	e38	e29	e9.0	e4.8	e3.4	e2.8	e2.4	e8.0	1610	501	327	241
24	e38	e28	e8.5	e4.6	e3.4	e2.8	e2.4	e13	1420	431	285	222
25	e36	e27	e8.5	e4.6	e3.4	e2.8	e2.4	e21	864	364	256	205
26	e36	e26	e8.0	e4.6	e3.4	e2.8	e2.4	e34	765	355	242	185
27	e36	e25	e8.0	e4.4	e3.4	e2.8	e2.4	e60	715	535	232	158
28	e34	e23	e8.0	e4.4	e3.4	e2.8	e2.4	e110	753	1270	208	e155
29	e34	e22	e7.5	e4.4	---	e2.7	e2.4	e200	906	954	196	150
30	e34	e21	e7.5	e4.4	---	e2.7	e2.4	e150	909	678	229	e145
31	e34	---	e7.5	e4.2	---	e2.7	---	e220	---	536	197	---
TOTAL	1540	889	363.5	168.7	104.6	91.9	75.5	871.6	47281	17570	30113	12626
MEAN	49.7	29.6	11.7	5.44	3.74	2.96	2.52	28.1	1576	567	971	421
MAX	85	32	20	7.0	4.2	3.2	2.7	220	3300	1390	4840	1400
MIN	34	21	7.5	4.2	3.4	2.7	2.4	2.2	320	262	196	145
MED	48	30	11	5.5	3.7	2.9	2.5	2.3	1280	535	554	298
AC-FT	3050	1760	721	335	207	182	150	1730	93780	34850	59730	25040
CFSM	.26	.16	.06	.03	.02	.02	.01	.15	8.25	2.97	5.09	2.20
IN.	.30	.17	.07	.03	.02	.02	.01	.17	9.21	3.42	5.86	2.46

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2001, BY WATER YEAR (WY)

	MEAN	49.7	29.6	11.7	5.44	3.74	2.96	2.52	28.1	1576	441	1059	678
MAX	49.7	29.6	11.7	5.44	3.74	2.96	2.52	28.1	1576	567	1147	935	
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2000	2000	
MIN	49.7	29.6	11.7	5.44	3.74	2.96	2.52	28.1	1576	315	971	421	
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2000	2001	2001	

SUMMARY STATISTICS

FOR 2001 WATER YEAR

WATER YEARS 2000 - 2001#

ANNUAL TOTAL	111694.8		
ANNUAL MEAN	306		
HIGHEST ANNUAL MEAN		306	2001
LOWEST ANNUAL MEAN		306	2001
HIGHEST DAILY MEAN	4840	Aug 13	2001
LOWEST DAILY MEAN	a2.2	May 11	2001
ANNUAL SEVEN-DAY MINIMUM	2.2	May 10	2001
INSTANTANEOUS PEAK FLOW	6240	Aug 12	2001
INSTANTANEOUS PEAK STAGE	53.29	Aug 12	2001
INSTANTANEOUS PEAK STAGE	b53.9	Jun 1	2001
ANNUAL RUNOFF (AC-FT)	221500		
ANNUAL RUNOFF (CFSM)	1.60		
ANNUAL RUNOFF (INCHES)	21.75		
10 PERCENT EXCEEDS	942		
50 PERCENT EXCEEDS	28		
90 PERCENT EXCEEDS	2.5		

See period of record, partial years used in monthly statistics

a From May 11-16

b From floodmarks, backwater from snow and ice

e Estimated

15746991 IKALUKKROK CREEK BELOW RED DOG CREEK NEAR KIVALINA

LOCATION.--Lat 68°02'51", long 163°01'34", in NE¹/₄ NW¹/₄ sec.33, T.31 N., R.19 W.(Delong Mountains A-2 quad) Northwest Arctic Borough, Hydrologic Unit 19050404, on left bank about 3.5 mi downstream from the mouth of Red Dog Creek, 2.5 mi upstream from the mouth of Dudd Creek, and 45 mi northeast of Kivalina.

DRAINAGE AREA.--98.6 mi².

PERIOD OF RECORD.--June 1995 to current year (no winter record).

GAGE.--Water-stage recorder. Elevation of gage is 650 ft above sea level, from topographic map. Prior to June 1, 1998 at site 1 mi upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Runoff from 3.6 mi² is impounded in tailings ponds and released intermittently at a maximum rate of 25 ft³/s. Meteor-burst telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, undetermined, July 25, 1996; gage height, 12.22 ft, at site and datum then in use.

EXTREMES FOR CURRENT PERIOD.--Maximum discharge, 4090 ft³/s, August 12, gage height, 11.81 ft; minimum not determined, occurs during the winter. Maximum gage height 16.5 ft, flow over ice May 16, 2001.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e80	e21	---	---	---	---	---	e1.0	e300	280	400	140
2	e75	e20	---	---	---	---	---	e1.0	e500	288	557	129
3	e70	e20	---	---	---	---	---	e1.0	e600	278	436	127
4	e65	e19	---	---	---	---	---	e1.0	e1000	295	368	140
5	e60	e19	---	---	---	---	---	e1.0	e1100	249	303	164
6	e55	e18	---	---	---	---	---	e1.0	e1200	209	263	241
7	e50	e18	---	---	---	---	---	e1.0	e1100	186	269	333
8	e49	e17	---	---	---	---	---	e1.0	1070	166	498	308
9	e48	e17	---	---	---	---	---	e1.0	1050	158	998	511
10	e46	e17	---	---	---	---	---	e1.0	791	151	871	563
11	e44	e16	---	---	---	---	---	e1.0	720	146	942	468
12	e42	e16	---	---	---	---	---	e1.0	948	148	2560	386
13	e40	e16	---	---	---	---	---	e1.0	940	148	2750	331
14	e38	e15	---	---	---	---	---	e1.0	665	142	1530	302
15	e36	e15	---	---	---	---	---	e1.0	404	134	870	280
16	e34	e15	---	---	---	---	---	e2.0	343	229	625	258
17	e34	e14	---	---	---	---	---	e3.0	428	446	486	238
18	e32	e14	---	---	---	---	---	e5.0	713	518	397	220
19	e32	e14	---	---	---	---	---	e5.0	609	338	345	206
20	e30	e14	---	---	---	---	---	e6.0	483	411	303	197
21	e29	e13	---	---	---	---	---	e6.0	500	345	268	185
22	e28	e13	---	---	---	---	---	e7.0	414	288	245	176
23	e27	e13	---	---	---	---	---	e8.0	556	266	225	169
24	e26	e12	---	---	---	---	---	e13	490	237	208	160
25	e25	e12	---	---	---	---	---	e22	334	209	195	153
26	e25	e11	---	---	---	---	---	e32	309	209	180	141
27	e24	e11	---	---	---	---	---	e50	313	439	170	e130
28	e23	e10	---	---	---	---	---	e90	329	763	160	e125
29	e23	e9.0	---	---	---	---	---	e170	371	525	151	e115
30	e22	e9.0	---	---	---	---	---	e120	350	395	163	e105
31	e22	---	---	---	---	---	---	e180	---	324	149	---
TOTAL	1234	448.0	---	---	---	---	---	734.0	18930	8920	17885	7001
MEAN	39.8	14.9	---	---	---	---	---	23.7	631	288	577	233
MAX	80	21	---	---	---	---	---	180	1200	763	2750	563
MIN	22	9.0	---	---	---	---	---	1.0	300	134	149	105
AC-FT	2450	889	---	---	---	---	---	1460	37550	17690	35470	13890
CFSM	.40	.15	---	---	---	---	---	.24	6.40	2.92	5.85	2.37
IN.	.47	.17	---	---	---	---	---	.28	7.14	3.37	6.75	2.64

e Estimated

15747000 WULIK RIVER BELOW TUTAK CREEK NEAR KIVALINA

LOCATION.--Lat 67°52'34", long 163°40'28", in NW¹/₄ sec. 34, T. 29 N., R. 22 W. (Noatak D-4 quad), Northwest Arctic Borough, Hydrologic Unit 19050404, on left bank 0.1 mi downstream from Tutak Creek and 25 mi northeast of Kivalina.

DRAINAGE AREA.--705 mi².

PERIOD OF RECORD.--September 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 175 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. GOES satellite telemetry at station. Flow from 2.8 square miles of the drainage basin is regulated by a tailings dam at the Red Dog Mine site. Up to 25 ft³/s of the flow at the gage may be discharge from Red Dog Mine during the summer period. Data for Water Year 2000 were omitted from Water Year 2000 Water Resources Data Report and are included here.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	782	e140	e49	e28	e20	e16	e14	e13	e5500	424	1460	1600
2	810	e135	e48	e28	e19	e16	e14	e13	e4500	676	4150	8960
3	743	e130	e47	e28	e19	e15	e14	e13	e4700	886	3700	8070
4	674	e125	e46	e27	e19	e15	e14	e13	e5000	737	5790	8580
5	586	e120	e45	e27	e19	e15	e13	e14	e6000	721	10600	12700
6	532	e115	e44	e26	e19	e15	e13	e14	8810	636	7000	10600
7	550	e110	e43	e26	e19	e15	e13	e16	8280	567	5510	6280
8	543	e105	e42	e26	e18	e15	e13	e40	9230	510	4780	4060
9	541	e103	e41	e25	e18	e15	e13	e50	7440	457	4150	2970
10	515	e99	e40	e25	e18	e15	e13	e50	5400	416	6550	2380
11	491	e95	e39	e25	e18	e15	e13	e80	5830	383	7090	1980
12	e340	e92	e39	e24	e18	e15	e13	e80	5070	350	6820	1660
13	e310	e89	e38	e24	e18	e15	e13	e200	3830	314	7450	1440
14	e360	e87	e37	e24	e17	e15	e13	e350	3940	286	5890	1350
15	e380	e84	e37	e24	e17	e14	e13	e600	2980	301	3910	1200
16	e375	e81	e36	e23	e17	e14	e13	e800	2170	918	2930	1090
17	e370	e79	e36	e23	e17	e14	e13	e1100	1710	1490	4210	914
18	e320	e76	e35	e23	e17	e14	e13	e1400	1260	3210	5170	922
19	e300	e74	e35	e22	e17	e14	e13	e1200	1250	2170	4190	851
20	e275	e71	e34	e22	e17	e14	e13	e800	1070	1410	3330	843
21	e260	e69	e33	e22	e16	e14	e13	e750	913	1040	2630	893
22	e240	e66	e33	e22	e16	e14	e13	e730	905	828	2140	e1050
23	e225	e64	e32	e21	e16	e14	e13	e710	800	731	1800	e900
24	e210	e62	e32	e21	e16	e14	e13	e800	779	662	1540	e800
25	e200	e60	e31	e21	e16	e14	e13	e600	661	600	1330	e700
26	e190	e59	e31	e21	e16	e14	e13	e300	560	838	1180	e640
27	e180	e57	e30	e21	e16	e14	e13	e280	571	1450	1060	e600
28	e170	e55	e30	e20	e16	e14	e13	e600	546	1140	1020	e560
29	e163	e53	e30	e20	e16	e14	e13	e600	494	942	984	e540
30	e155	e51	e29	e20	---	e14	e13	e800	446	1090	918	e520
31	e147	---	e29	e20	---	e14	---	e1300	---	1330	1020	---
TOTAL	11937	2606	1151	729	505	450	394	14316	100645	27513	120302	85653
MEAN	385	86.9	37.1	23.5	17.4	14.5	13.1	462	3355	888	3881	2855
MAX	810	140	49	28	20	16	14	1400	9230	3210	10600	12700
MIN	147	51	29	20	16	14	13	13	446	286	918	520
AC-FT	23680	5170	2280	1450	1000	893	781	28400	199600	54570	238600	169900
CFSM	.55	.12	.05	.03	.02	.02	.02	.66	4.76	1.26	5.50	4.05
IN.	.63	.14	.06	.04	.03	.02	.02	.76	5.31	1.45	6.35	4.52

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2000, BY WATER YEAR (WY)#

	MEAN	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	563	141	62.7	34.2	22.9	17.6	15.3	1950	3121	1761	2918	1672					
MAX	1542	290	111	70.0	49.3	39.5	38.8	4856	6669	6144	8458	2855					
(WY)	1994	1994	1986	1986	1986	1991	1991	1993	1989	1989	1994	2000					
MIN	207	68.5	34.2	21.5	12.0	9.10	9.00	20.6	1372	424	496	386					
(WY)	1997	1988	1988	1992	1992	1992	1992	1989	1988	1999	1991	1991					

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1985 - 2000#
ANNUAL TOTAL	240792	366201	
ANNUAL MEAN	660	1001	1028
HIGHEST ANNUAL MEAN			1843
LOWEST ANNUAL MEAN			530
HIGHEST DAILY MEAN	8110	Aug 1	29400
LOWEST DAILY MEAN	a15	Apr 29	c9.0
ANNUAL SEVEN-DAY MINIMUM	15	Apr 29	9.0
MAXIMUM PEAK FLOW		14200	38500
MAXIMUM PEAK STAGE		9.15	12.21
MAXIMUM PEAK STAGE		d10.48	d13.5
ANNUAL RUNOFF (AC-FT)	477600	726400	745000
ANNUAL RUNOFF (CFSM)	.94	1.42	1.46
ANNUAL RUNOFF (INCHES)	12.71	19.32	19.82
10 PERCENT EXCEEDS	1900	3850	2920
50 PERCENT EXCEEDS	95	94	130
90 PERCENT EXCEEDS	17	14	14

See period of record
a From Apr. 29 to May 11
b From Apr. 5 to May 4
c From Apr. 30 to May 10, 1985, and Mar. 4 to May 17, 1992
d From floodmarks, backwater from snow and ice
e Estimated

15747000 WULIK RIVER BELOW TUTAK CREEK NEAR KIVALINA--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e500	e190	e110	e75	e55	e42	e32	e25	e3500	1840	1850	751
2	e480	e190	e110	e75	e55	e42	e32	e25	e5000	1750	3370	700
3	e460	e180	e110	e75	e50	e40	e32	e25	e6000	1660	2970	680
4	e440	e180	e110	e75	e50	e40	e30	e24	e9000	1720	2320	683
5	e430	e170	e100	e70	e50	e40	e30	e24	e10000	1520	1850	793
6	e420	e170	e100	e70	e50	e40	e30	e24	9880	1220	1500	955
7	e400	e170	e100	e70	e50	e40	e30	e24	9570	1020	1310	1410
8	e380	e160	e100	e70	e50	e40	e30	e24	8270	913	1650	1440
9	e370	e160	e100	e70	e50	e38	e29	e23	7850	831	5320	2180
10	e360	e160	e95	e70	e50	e38	e29	e23	6560	763	5270	3840
11	e350	e150	e95	e65	e50	e38	e29	e23	5020	740	5400	3230
12	e340	e150	e95	e65	e48	e38	e29	e23	6330	766	10300	2720
13	e330	e150	e95	e65	e48	e38	e29	e23	7480	772	21100	2180
14	e320	e150	e90	e65	e48	e37	e28	e23	6600	767	14400	1740
15	e300	e140	e90	e65	e48	e36	e28	e23	3770	712	7810	1500
16	e290	e140	e90	e65	e48	e36	e28	e24	2930	778	4750	1440
17	e280	e140	e90	e65	e46	e36	e28	e25	3030	2790	3370	1290
18	e280	e140	e90	e60	e46	e36	e28	e27	4130	3590	2550	1170
19	e270	e130	e85	e60	e46	e36	e27	e29	4950	2420	2100	1070
20	e260	e130	e85	e60	e46	e36	e27	e32	3440	2050	1790	989
21	e250	e130	e85	e60	e44	e36	e27	e36	3560	1860	1520	931
22	e250	e130	e85	e60	e44	e34	e27	e42	2780	1570	1340	864
23	e240	e130	e85	e60	e44	e34	e27	e50	3860	1340	1210	807
24	e230	e120	e80	e60	e44	e34	e26	e60	3760	1210	1090	756
25	e230	e120	e80	e60	e44	e34	e26	e80	2640	1040	984	711
26	e220	e120	e80	e55	e42	e34	e26	e120	2120	989	900	662
27	e220	e120	e80	e55	e42	e34	e26	e250	2120	1250	828	615
28	e210	e120	e80	e55	e42	e34	e26	e460	1960	3690	777	596
29	e210	e110	e80	e55	---	e32	e25	e650	2290	3460	742	547
30	e200	e110	e75	e55	---	e32	e25	e750	2430	2470	829	521
31	e200	---	e75	e55	---	e32	---	e1000	---	1860	830	---
TOTAL	9720	4360	2825	1985	1330	1137	846	3991	150830	49361	112030	37771
MEAN	314	145	91.1	64.0	47.5	36.7	28.2	129	5028	1592	3614	1259
MAX	500	190	110	75	55	42	32	1000	10000	3690	21100	3840
MIN	200	110	75	55	42	32	25	23	1960	712	742	521
AC-FT	19280	8650	5600	3940	2640	2260	1680	7920	299200	97910	222200	74920
CFSM	.44	.21	.13	.09	.07	.05	.04	.18	7.13	2.26	5.13	1.79
IN.	.51	.23	.15	.10	.07	.06	.04	.21	7.96	2.60	5.91	1.99

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2001, BY WATER YEAR (WY)#

	MEAN	548	141	64.4	36.0	24.3	18.7	16.0	1843	3234	1751	2959	1648
MAX	1542	290	111	70.0	49.3	39.5	38.8	4856	6669	6144	8458	2855	
(WY)	1994	1994	1986	1986	1986	1991	1991	1993	1989	1989	1994	2000	
MIN	207	68.5	34.2	21.5	12.0	9.10	9.00	20.6	1372	424	496	386	
(WY)	1997	1988	1988	1992	1992	1992	1992	1989	1988	1999	1991	1991	

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1985 - 2001#
ANNUAL TOTAL	367412	376186	
ANNUAL MEAN	1004	1031	1029
HIGHEST ANNUAL MEAN			1843
LOWEST ANNUAL MEAN			530
HIGHEST DAILY MEAN	12700	21100	29400
LOWEST DAILY MEAN	a13	b23	c9.0
ANNUAL SEVEN-DAY MINIMUM	13	23	9.0
MAXIMUM PEAK FLOW		23100	38500
MAXIMUM PEAK STAGE		10.52	12.21
MAXIMUM PEAK STAGE			d13.5
ANNUAL RUNOFF (AC-FT)	728800	746200	745100
ANNUAL RUNOFF (CFSM)	1.42	1.46	1.46
ANNUAL RUNOFF (INCHES)	19.39	19.85	19.82
10 PERCENT EXCEEDS	3850	3110	2930
50 PERCENT EXCEEDS	150	120	130
90 PERCENT EXCEEDS	14	29	14

See period of record

a From Apr. 5 to May 4

b From May 9-15

c From Apr. 30 to May 10, 1985, and Mar. 4 to May 17, 1992

d From floodmarks, backwater from snow and ice

e Estimated

15798700 NUNAVAK CREEK NEAR BARROW

LOCATION.--Lat 71°15'35", long 156°46'57", in SE¹/₄ sec. 18, T. 22 N., R. 18 W. (Barrow B-4 quad), North Slope Borough, Hydrologic Unit 19060202, 0.7 mi downstream from Emaiksoun Lake, 1.2 mi upstream from Nunavak Bay, and 2.3 mi south of Barrow Post Office.

DRAINAGE AREA.--2.79 mi², approximately.

PERIOD OF RECORD.--October 1971 to current year.

REVISED RECORDS.--WDR AK-76-1: 1972.

GAGE.--Water-stage recorder. Elevation of gage is 19 ft above sea level, from topographic map. Prior to May 29, 1982, at site 10 ft downstream at datum about 29.6 ft higher.

REMARKS.--Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	4.3	1.5	e.28
2	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	3.9	1.4	e.27
3	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	3.7	.78	e.32
4	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	3.5	1.7	e.35
5	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	3.3	1.2	e.34
6	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	3.0	.54	e.32
7	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	2.5	.47	e.30
8	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	2.1	.57	e.34
9	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	1.9	1.7	e.50
10	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.50	1.7	2.4	e.90
11	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e1.0	1.5	3.0	e.85
12	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e4.0	1.2	3.9	e.80
13	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e45	1.1	6.1	e.74
14	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e70	.78	3.1	e.65
15	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e51	.72	2.0	e.69
16	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	24	.66	1.4	e.62
17	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	17	.78	1.2	e.53
18	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	12	.72	.61	e.49
19	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	9.7	1.0	.50	e.46
20	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	8.8	1.7	.50	e.39
21	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	8.2	1.2	.44	e.36
22	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	7.6	.92	.38	e.32
23	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	7.3	1.5	e.37	e.23
24	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	6.8	1.4	e.35	e.20
25	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	6.6	1.2	e.34	e.19
26	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	6.1	.72	e.32	e.18
27	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	6.1	.54	e.31	e.17
28	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	5.6	.66	e.30	e.16
29	e.00	e.00	e.00	e.00	---	e.00	e.00	e.00	5.2	1.4	e.30	e.15
30	e.00	e.00	e.00	e.00	---	e.00	e.00	e.00	4.7	1.2	e.31	e.14
31	e.00	---	e.00	e.00	---	e.00	---	e.00	---	.78	e.29	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	307.20	51.58	38.28	12.24
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	10.2	1.66	1.23	.41
MAX	.00	.00	.00	.00	.00	.00	.00	.00	70	4.3	6.1	.90
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.54	.29	.14
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	609	102	76	24
CFSM	.00	.00	.00	.00	.00	.00	.00	.00	3.67	.60	.44	.15
IN.	.00	.00	.00	.00	.00	.00	.00	.00	4.10	.69	.51	.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2001, BY WATER YEAR (WY)#

	MEAN	.031	.000	.000	.000	.000	.000	.20	8.52	2.04	.90	1.02
MAX	.22	.000	.000	.000	.000	.000	.000	3.55	17.3	9.93	6.79	8.34
(WY)	1980	1972	1972	1972	1972	1972	1972	1990	1999	1981	1994	1986
MIN	.000	.000	.000	.000	.000	.000	.000	.000	2.73	.091	.001	.000
(WY)	1972	1972	1972	1972	1972	1972	1972	1972	1992	1983	1983	1975

e Estimated

15798700 NUNAVAK CREEK NEAR BARROW--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1972 - 2001	
ANNUAL TOTAL	506.37		409.30			
ANNUAL MEAN	1.38		1.12		1.05	
HIGHEST ANNUAL MEAN					2.26 1989	
LOWEST ANNUAL MEAN					.26 1992	
HIGHEST DAILY MEAN	52	Jun 16	70	Jun 14	110	Jun 14 1994
LOWEST DAILY MEAN	a.00	Jan 1	b.00	Oct 1	c.00	Oct 1 1971
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1971
MAXIMUM PEAK FLOW			84	Jun 14	d131	Jun 10 1980
MAXIMUM PEAK STAGE			fg34.26	Jun 13	g34.36	Jun 11 1994
ANNUAL RUNOFF (AC-FT)	1000		812		763	
ANNUAL RUNOFF (CFSM)	.50		.40		.38	
ANNUAL RUNOFF (INCHES)	6.75		5.46		5.13	
10 PERCENT EXCEEDS	5.5		1.7		2.0	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

a From Jan. 1 to Jun. 9 and Sep. 30 to Dec. 31

b From Oct. 1 to Jun. 9

c No flow during winter months and at times during summer months

d At site and datum then in use, flow over snow.

f Maximum observed but may have been higher prior to gage startup, Jun. 10-13

g Backwater from snow and ice

15896000 KUPARUK RIVER NEAR DEADHORSE

LOCATION.--Lat 70°16'54", long 148°57'35", in NE¹/₄ sec. 25, T. 11 N., R. 12 E. (Beechey Point B-4 quad), North Slope Borough, Hydrologic Unit 19060401, on right bank, 1.8 mi northeast of SE Eileen State No. 1, 2.1 mi south of Frontier Service City Camp, 10 mi upstream from mouth on Gwyder Bay, and 13 mi northwest of Deadhorse.

DRAINAGE AREA.--3,130 mi².

PERIOD OF RECORD.--June 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is at sea level (levels by private engineering firm).

REMARKS.--Records fair except for estimated daily discharges, which are poor. Winter low flow may be discontinuous as the flow probably varies significantly along the main stem of the river due to the formation of aufeis in the vicinity of springs. Flow may cease at other points. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e300	e46	e4.0	e.0	e.0	e.0	e.0	e.0	e.0	2370	1120	1410
2	e280	e44	e3.0	e.0	e.0	e.0	e.0	e.0	e.0	2160	2640	1340
3	e270	e40	e3.0	e.0	e.0	e.0	e.0	e.0	e.0	1770	2480	1270
4	e260	e37	e3.0	e.0	e.0	e.0	e.0	e.0	e.0	1510	2100	1200
5	e250	e34	e2.0	e.0	e.0	e.0	e.0	e.0	e.0	1320	2060	1190
6	e240	e32	e2.0	e.0	e.0	e.0	e.0	e.0	e1000	1120	2070	1150
7	e230	e27	e2.0	e.0	e.0	e.0	e.0	e.0	e4000	1010	1960	1120
8	e220	e25	e2.0	e.0	e.0	e.0	e.0	e.0	e12000	963	1800	1110
9	e210	e24	e2.0	e.0	e.0	e.0	e.0	e.0	e38000	1100	1660	1090
10	e200	e22	e2.0	e.0	e.0	e.0	e.0	e.0	e55000	1330	1490	1100
11	e190	e20	e1.0	e.0	e.0	e.0	e.0	e.0	e43000	1250	1330	1160
12	e180	e19	e1.0	e.0	e.0	e.0	e.0	e.0	e30000	1100	1300	1230
13	e170	e18	e1.0	e.0	e.0	e.0	e.0	e.0	e22200	962	1870	1260
14	e160	e16	e1.0	e.0	e.0	e.0	e.0	e.0	e16500	847	4150	1240
15	e150	e15	e1.0	e.0	e.0	e.0	e.0	e.0	e12100	753	10700	1190
16	e140	e14	e1.0	e.0	e.0	e.0	e.0	e.0	e9820	698	21600	1170
17	e130	e13	e1.0	e.0	e.0	e.0	e.0	e.0	e8270	662	19300	1160
18	e120	e11	e1.0	e.0	e.0	e.0	e.0	e.0	e6480	630	13400	1470
19	e120	e10	e1.0	e.0	e.0	e.0	e.0	e.0	e5070	594	9650	1890
20	e110	e9.0	e1.0	e.0	e.0	e.0	e.0	e.0	e3970	577	7400	1960
21	e100	e9.0	e1.0	e.0	e.0	e.0	e.0	e.0	e3260	563	5770	1750
22	e95	e8.0	e.0	e.0	e.0	e.0	e.0	e.0	e2760	521	4620	1570
23	e90	e7.0	e.0	e.0	e.0	e.0	e.0	e.0	e2460	503	3800	1420
24	e85	e7.0	e.0	e.0	e.0	e.0	e.0	e.0	e2550	556	3230	1340
25	e80	e6.0	e.0	e.0	e.0	e.0	e.0	e.0	e2770	650	2820	1260
26	e75	e6.0	e.0	e.0	e.0	e.0	e.0	e.0	e2590	641	2520	1160
27	e70	e5.0	e.0	e.0	e.0	e.0	e.0	e.0	e2230	618	2240	e1100
28	e65	e5.0	e.0	e.0	e.0	e.0	e.0	e.0	e1870	600	2000	e1000
29	e60	e4.0	e.0	e.0	---	e.0	e.0	e.0	e1650	712	1790	e940
30	e55	e4.0	e.0	e.0	---	e.0	e.0	e.0	e1910	783	1650	e860
31	e50	---	e.0	e.0	---	e.0	---	e.0	---	795	1510	---
TOTAL	4755	537.0	36.0	0.0	0.0	0.0	0.0	0.0	291460.0	29668	142030	38110
MEAN	153	17.9	1.16	.000	.000	.000	.000	.000	9715	957	4582	1270
MAX	300	46	4.0	.0	.0	.0	.0	.0	55000	2370	21600	1960
MIN	50	4.0	.0	.0	.0	.0	.0	.0	.0	503	1120	860
MED	140	14	1.0	.0	.0	.0	.0	.0	3020	783	2240	1200
AC-FT	9430	1070	71	.00	.00	.00	.00	.00	578100	58850	281700	75590
CFSM	.05	.01	.00	.00	.00	.00	.00	.00	3.10	.31	1.46	.41
IN.	.06	.01	.00	.00	.00	.00	.00	.00	3.46	.35	1.69	.45

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2001, BY WATER YEAR (WY)#

	MEAN	233	20.4	2.65	1.03	1.01	1.00	1.00	1530	10730	1095	1634	1513
MAX	692	174	24.3	10.0	10.0	10.0	10.0	10.0	8877	26360	3169	5095	4863
(WY)	1978	1973	1973	1972	1972	1972	1972	1972	1996	1982	1999	1989	1997
MIN	10.0	.000	.000	.000	.000	.000	.000	.000	.000	726	300	127	192
(WY)	1975	1977	1977	1976	1976	1975	1975	1975	1990	1971	1990	1990	1974

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1971 - 2001 #
ANNUAL TOTAL	602666.0	506596.0	
ANNUAL MEAN	1647	1388	1415
HIGHEST ANNUAL MEAN			4657
LOWEST ANNUAL MEAN			658
HIGHEST DAILY MEAN	78000 Jun 13	55000 Jun 10	100000 Jun 7 1978
LOWEST DAILY MEAN	a.0 Jan 1	b.0 Dec 22	c.0 Mar 1 1975
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Dec 22	.00 Mar 1 1975
MAXIMUM PEAK FLOW		d	118000 Jun 7 1978
MAXIMUM PEAK STAGE		f36.74 Jun 9	37.60 Jun 7 1978
ANNUAL RUNOFF (AC-FT)	1195000	1005000	1025000
ANNUAL RUNOFF (CFSM)	.53	.44	.45
ANNUAL RUNOFF (INCHES)	7.16	6.02	6.14
10 PERCENT EXCEEDS	2800	2290	2700
50 PERCENT EXCEEDS	2.0	2.0	10
90 PERCENT EXCEEDS	.00	.00	.00

See Period of Record, partial years used in monthly statistics

a From Jan. 1 to Jun. 7

b From Dec. 22 to Jun. 5

c No flow during winter months

d Not determined, occurred during period of backwater from ice and snow, see highest daily mean

e Estimated

f Backwater from snow and ice

15906000 SAGAVANIRKTOK RIVER TRIBUTARY NEAR PUMP STATION 3

LOCATION.--Lat 68°41'13", long 149°05'42", in SW¹/₄ sec. 4, T. 9 S., R. 13 E. (Phillip Smith Mountains C-4 quad), Hydrologic Unit 19060402, on right bank 30 ft downstream from culvert, at mi 297.9 Dalton Highway, 14 mi south of Pump Station 3, and 16.5 mi upstream from mouth.

DRAINAGE AREA.--28.4 mi².

PERIOD OF RECORD.--Annual maximums, water years 1979-87. October 1987 to current year.(No winter record in water year 1989.)

REVISED RECORDS.--WDR AK-96-1:1992(M), 1994(M), 1995(M).

GAGE.--Water stage recorder. Elevation of gage is 2,475 ft above sea level, from topographic map. Crest-stage gage only, August 15, 1979 to September 12, 1987, 30 ft upstream of culvert at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e4.8	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e3.0	31	65	15
2	e4.6	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e10	24	59	16
3	e4.4	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e50	20	64	15
4	e4.1	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e130	23	60	14
5	e3.9	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e100	36	54	14
6	e3.7	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e110	46	53	20
7	e3.4	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e140	70	47	20
8	e3.2	e.00	e.00	e.00	e.00	e.00	e.00	e.00	199	52	38	22
9	e3.0	e.00	e.00	e.00	e.00	e.00	e.00	e.00	162	37	38	21
10	e2.9	e.00	e.00	e.00	e.00	e.00	e.00	e.00	112	29	48	18
11	e2.7	e.00	e.00	e.00	e.00	e.00	e.00	e.00	128	25	68	16
12	e2.5	e.00	e.00	e.00	e.00	e.00	e.00	e.00	100	23	71	14
13	e2.3	e.00	e.00	e.00	e.00	e.00	e.00	e.00	74	22	73	13
14	e2.2	e.00	e.00	e.00	e.00	e.00	e.00	e.00	55	25	122	12
15	e2.1	e.00	e.00	e.00	e.00	e.00	e.00	e.00	42	32	193	12
16	e1.9	e.00	e.00	e.00	e.00	e.00	e.00	e.00	34	22	183	15
17	e1.8	e.00	e.00	e.00	e.00	e.00	e.00	e.00	30	20	130	14
18	e1.7	e.00	e.00	e.00	e.00	e.00	e.00	e.00	26	36	92	12
19	e1.5	e.00	e.00	e.00	e.00	e.00	e.00	e.00	23	32	66	11
20	e1.4	e.00	e.00	e.00	e.00	e.00	e.00	e.00	20	29	50	10
21	e1.3	e.00	e.00	e.00	e.00	e.00	e.00	e.00	19	26	40	9.2
22	e1.2	e.00	e.00	e.00	e.00	e.00	e.00	e.00	24	21	34	8.6
23	e1.1	e.00	e.00	e.00	e.00	e.00	e.00	e.00	25	18	30	e7.6
24	e1.0	e.00	e.00	e.00	e.00	e.00	e.00	e.00	20	21	27	e7.0
25	e.90	e.00	e.00	e.00	e.00	e.00	e.00	e.00	18	31	24	e6.5
26	e.80	e.00	e.00	e.00	e.00	e.00	e.00	e.00	19	36	22	e6.0
27	e.70	e.00	e.00	e.00	e.00	e.00	e.00	e.00	66	31	19	e5.5
28	e.60	e.00	e.00	e.00	e.00	e.00	e.00	e.00	96	27	18	e5.0
29	e.50	e.00	e.00	e.00	---	e.00	e.00	e.00	66	68	17	e4.6
30	e.30	e.00	e.00	e.00	---	e.00	e.00	e.00	43	122	15	e4.2
31	e.10	---	e.00	e.00	---	e.00	---	e1.0	---	95	14	---
TOTAL	66.60	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1944.0	1130	1834	368.2
MEAN	2.15	.000	.000	.000	.000	.000	.000	.032	64.8	36.5	59.2	12.3
MAX	4.8	.00	.00	.00	.00	.00	.00	1.0	199	122	193	22
MIN	.10	.00	.00	.00	.00	.00	.00	.00	3.0	18	14	4.2
AC-FT	132	.00	.00	.00	.00	.00	.00	2.0	3860	2240	3640	730
CFSM	.08	.00	.00	.00	.00	.00	.00	.00	2.28	1.28	2.08	.43
IN.	.09	.00	.00	.00	.00	.00	.00	.00	2.55	1.48	2.40	.48

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2001, BY WATER YEAR (WY)#

	MEAN	2.73	.000	.000	.000	.000	.000	36.0	55.4	34.4	45.2	27.9
	MAX	6.84	.000	.000	.000	.000	.000	95.6	150	81.6	90.8	77.4
	(WY)	1999	1988	1988	1988	1988	1988	1995	1992	1999	1997	1997
	MIN	.000	.000	.000	.000	.000	.000	.032	10.4	8.19	3.17	9.56
	(WY)	1988	1988	1988	1988	1988	1988	2001	1988	1990	1990	2000

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR			FOR 2001 WATER YEAR			WATER YEARS 1988 - 2001#		
ANNUAL TOTAL	5122.90			5343.80					
ANNUAL MEAN	14.0			14.6			17.1		
HIGHEST ANNUAL MEAN							27.9		
LOWEST ANNUAL MEAN							7.49		
HIGHEST DAILY MEAN	500			199			809		
LOWEST DAILY MEAN	a.00			b.00			c.00		
ANNUAL SEVEN-DAY MINIMUM	.00			.00			.00		
MAXIMUM PEAK FLOW				226			d940		
MAXIMUM PEAK STAGE				19.41			21.20		
MAXIMUM PEAK STAGE				f20.2					
ANNUAL RUNOFF (AC-FT)	10160			10600			12370		
ANNUAL RUNOFF (CFSM)	.49			.52			.60		
ANNUAL RUNOFF (INCHES)	6.71			7.00			8.17		
10 PERCENT EXCEEDS	37			49			49		
50 PERCENT EXCEEDS	.00			.00			.00		
90 PERCENT EXCEEDS	.00			.00			.00		

See Period of Record, partial years used in monthly statistics

a From Jan. 1 to May 29 and Nov. 1 to Dec. 31

b From Nov. 1 to May 30

c No flow during winter months

d From rating extended above 450 ft³/s on basis of slope-area measurement of peak discharge

e Estimated

f From floodmarks at recording gage

15908000 SAGAVANIRKTOK RIVER NEAR PUMP STATION 3

LOCATION.--Lat 69°00'54", long 148°49'02", in NW¹/₄ sec. 16, T. 5 S., R. 14 E. (Sagavanirktok River A-4 quad), North Slope Borough, Hydrologic Unit 19060402, on left bank 600 ft east of Dalton Highway at mi 324.7, 6.0 mi upstream from Lupine River, and 15 mi north of Pump Station 3.

DRAINAGE AREA.--1,860 mi², approximately.

PERIOD OF RECORD.--September 1982 to current year.

GAGE.--Water-stage recorder. Elevation is 1,150 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Precipitation gage and air temperature recorder at station, daily values of precipitation and air temperature are available from the computer files of the Alaska District. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e680	e300	e180	e130	e110	e96	e86	e80	e270	5770	4460	1870
2	e660	e290	e180	e130	e110	e96	e86	e80	e460	5360	4290	1960
3	e640	e290	e180	e130	e110	e96	e86	e80	e700	4840	4310	1850
4	e640	e280	e170	e130	e110	e96	e86	e80	e1200	5080	4270	1810
5	e620	e280	e170	e130	e110	e96	e86	e80	e2100	7000	4150	1770
6	e580	e270	e170	e130	e110	e94	e86	e78	e3400	6000	4010	1960
7	e560	e260	e170	e130	e110	e94	e86	e78	e5400	4990	3700	1970
8	e560	e260	e170	e130	e110	e94	e84	e78	e7000	4230	3560	1950
9	e540	e250	e160	e130	e110	e94	e84	e78	e9000	3520	3600	1890
10	e520	e250	e160	e130	e110	e94	e84	e78	10600	3230	3840	1780
11	e500	e240	e160	e130	e110	e94	e84	e76	10900	3200	4880	1690
12	e490	e240	e160	e130	e100	e92	e84	e76	8570	3730	5550	1620
13	e480	e240	e160	e120	e100	e92	e84	e76	7980	4420	5510	1550
14	e460	e230	e160	e120	e100	e92	e84	e76	7160	4700	6250	1490
15	e450	e230	e150	e120	e100	e92	e84	e76	5550	4880	9540	1460
16	e440	e230	e150	e120	e100	e92	e84	e76	4310	4880	9160	1550
17	e420	e220	e150	e120	e100	e90	e84	e76	5060	4990	6880	1520
18	e410	e220	e150	e120	e100	e90	e84	e76	6090	5470	5180	1420
19	e400	e220	e150	e120	e100	e90	e84	e76	5020	4720	4110	1340
20	e390	e210	e150	e120	e100	e90	e84	e74	3850	4430	3390	1280
21	e380	e210	e150	e120	e100	e90	e82	e74	4220	5210	2930	1230
22	e370	e210	e150	e120	e100	e90	e82	e74	5850	4700	2660	1190
23	e360	e200	e140	e120	e100	e90	e82	e74	6050	5060	2500	1140
24	e360	e200	e140	e120	e98	e88	e82	e74	6250	8110	2340	1150
25	e350	e200	e140	e120	e98	e88	e82	e74	6510	7410	2160	1110
26	e340	e200	e140	e120	e98	e88	e82	e74	7700	6170	2050	1050
27	e330	e190	e140	e110	e98	e88	e80	e74	7330	5230	1940	e980
28	e320	e190	e140	e110	e96	e88	e80	e74	6280	4700	1860	e960
29	e320	e190	e140	e110	---	e88	e80	e74	6290	4700	1790	e920
30	e310	e180	e140	e110	---	e86	e80	e74	5880	5950	1800	e860
31	e300	---	e130	e110	---	e86	---	e150	---	5130	1780	---
TOTAL	14180	6980	4800	3790	2898	2834	2506	2438	166980	157810	124450	44320
MEAN	457	233	155	122	104	91.4	83.5	78.6	5566	5091	4015	1477
MAX	680	300	180	130	110	96	86	150	10900	8110	9540	1970
MIN	300	180	130	110	96	86	80	74	270	3200	1780	860
AC-FT	28130	13840	9520	7520	5750	5620	4970	4840	331200	313000	246800	87910
CFSM	.25	.13	.08	.07	.06	.05	.04	.04	2.99	2.74	2.16	.79
IN.	.28	.14	.10	.08	.06	.06	.05	.05	3.34	3.16	2.49	.89

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2001, BY WATER YEAR (WY)#

MEAN	574	208	75.9	36.1	22.4	18.3	19.7	1261	5921	4799	3897	1872
MAX	1172	358	233	180	150	128	117	3588	9737	7370	6252	3984
(WY)	1996	1996	1998	1998	1998	1998	1998	1993	1992	1995	1987	1997
MIN	279	76.0	4.03	.000	.000	.000	.000	4.77	3875	2839	1897	883
(WY)	1983	1984	1991	1983	1983	1983	1984	1986	1985	1991	1990	1983

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1982 - 2001#	
ANNUAL TOTAL	588961.0		533986			
ANNUAL MEAN	1609		1463		1567	
HIGHEST ANNUAL MEAN					2071	
LOWEST ANNUAL MEAN					993	
HIGHEST DAILY MEAN	25000		10900		35300	
LOWEST DAILY MEAN	a1.0		b74		c.00	
ANNUAL SEVEN-DAY MINIMUM	1.0		74		.00	
MAXIMUM PEAK FLOW			12300		42900	
MAXIMUM PEAK STAGE			18.16		20.67	
MAXIMUM PEAK STAGE			d19.5		d25.68	
ANNUAL RUNOFF (AC-FT)	1168000		1059000		1135000	
ANNUAL RUNOFF (CFSM)	.87		.79		.84	
ANNUAL RUNOFF (INCHES)	11.78		10.68		11.44	
10 PERCENT EXCEEDS	4780		5190		5000	
50 PERCENT EXCEEDS	190		180		190	
90 PERCENT EXCEEDS	1.0		82		.00	

See Period of Record, partial years used in monthly statistics
a From Feb. 10 to May 27
b From May 20 to 30
c No flow during winter months water years 1983 to 1995
d From floodmarks, backwater from ice and snow
e Estimated

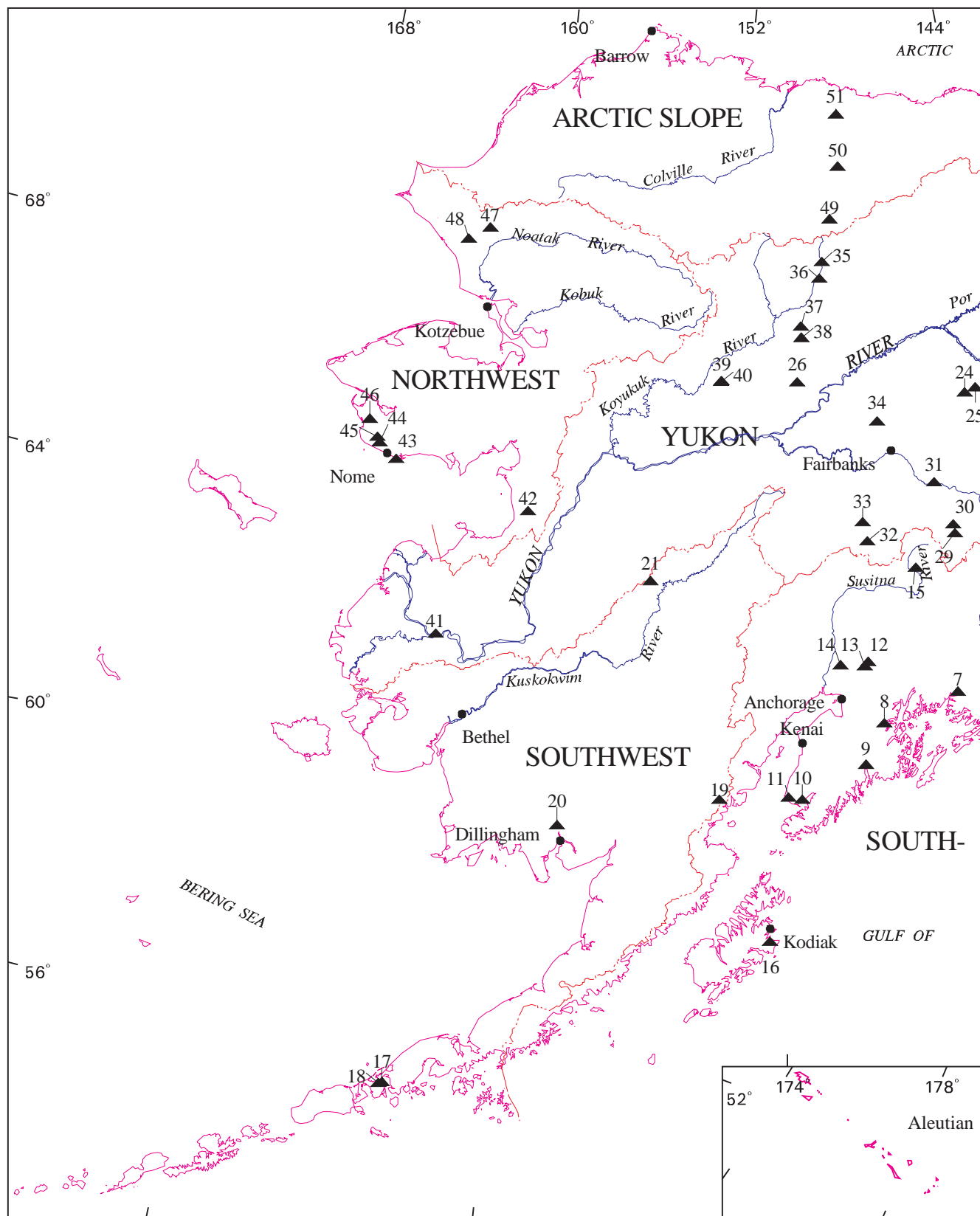
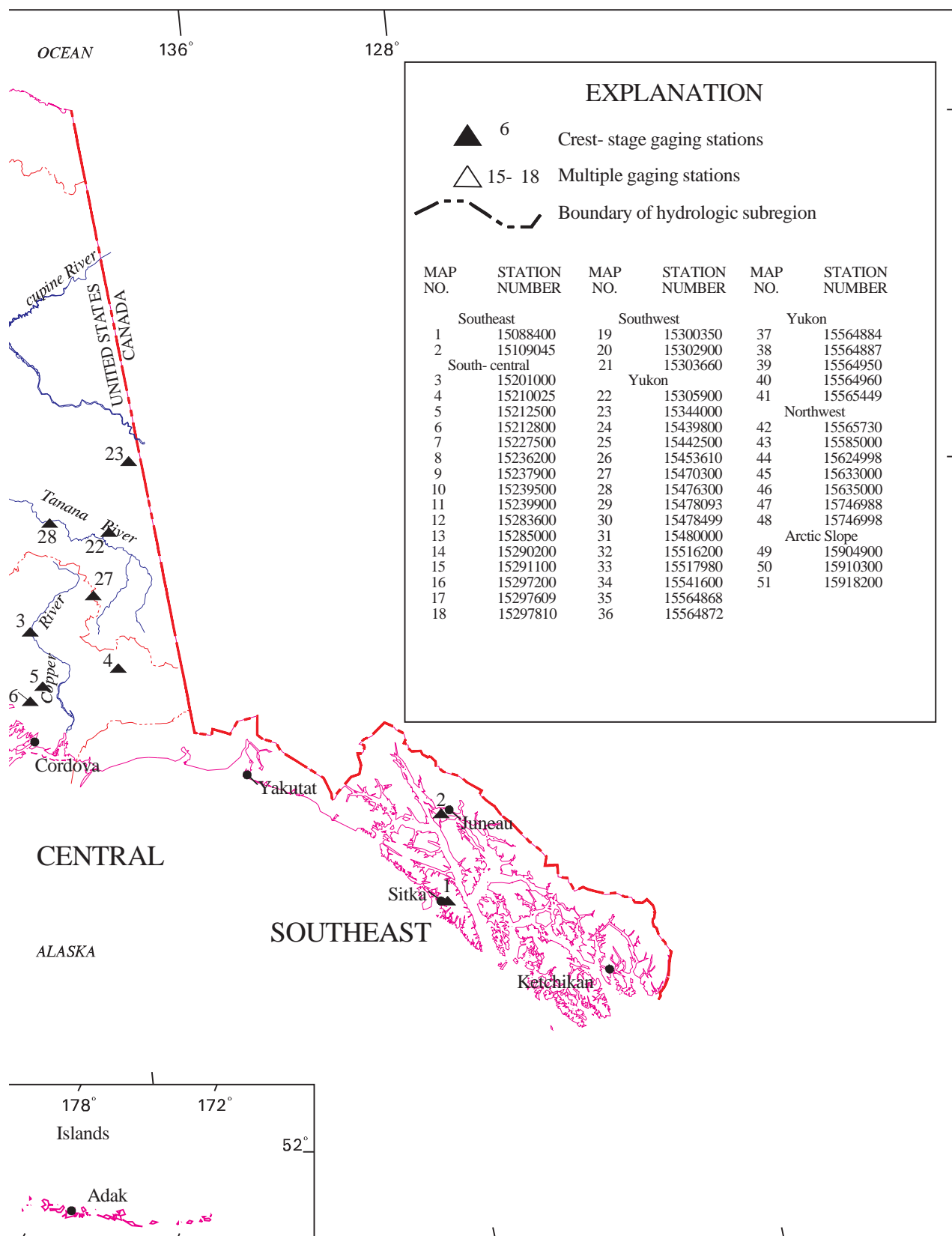


Figure 2. Locations of crest-stage partial-record stations



DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or flood-flow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records of partial-record stations are presented in the table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a second table.

CREST-STAGE PARTIAL-RECORD STATIONS

The following table contains annual maximum discharge for crest-stage stations. A crest-stage gage is a device that will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain, but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. The maximum discharge for each water year is given. The maximum discharge for the current water year and the maximum for the period of record are presented in the table below. However, at some stations the maximum discharge from spring runoff and from rainfall are shown by the symbols S/ and R/, respectively. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Maximum discharge at crest-stage partial-record stations
[Footnotes at end of table on p. 369]

Station name and number	Location and drainage area	Period of record	Water year 2001 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
SOUTHEAST ALASKA								
Cupola Peak Creek at Bear Cove near Sitka (15088400)	Lat 57°00′39″, long 135°09′11″, in NE ¹ / ₄ SE ¹ / ₄ SE ¹ / ₄ sec. 13, T. 56 S., R. 64 E. (Sitka A-4 quad), on Baranof Island, in the Tongass National Forest, on left bank 200 ft downstream from Green Lake road crossing, 400 ft upstream from mouth at south shore of Bear Cove in Silver Bay, and about 7.1 mi southeast of Sitka. Drainage area is 0.43 mi ² .	2000-2001	12-05-00	10.77	n	9-04-00 and 12-05-00	10.77	n
North Fork Peterson Creek near Auke Bay (15109045)	Lat 58°17′02″, long 134°39′49″, in SE ¹ / ₄ NW ¹ / ₄ SW ¹ / ₄ , sec. 29, T. 41 S., R. 66 E. (Juneau B-2 SW quad), City and Borough of Juneau, on Douglas Island, Ton- gass National Forest, on left bank, 300 ft upstream from mouth, 7.3 mi south of Auke Bay, and 9.5 mi west of Douglas. Drainage area is 1.59 mi ² ., revised.	1997-2001	9-18-01	22.01	48	11-01-99 and 12-28-99	23.38	160

Maximum discharge at crest-stage partial-record stations--Continued
 [Footnotes at end of table on p. 369]

Station name and number	Location and drainage area	Period of record	Water year 2001 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
SOUTH-CENTRAL ALASKA								
Dry Creek near Glennallen (15201000)	Lat 62°08'49", long 145°28'31", in NE ¹ / ₄ sec. 7, T. 4 N., R.1 W. (Gulkana A-3 quad), on left bank 135 ft upstream from culvert at mi 119 Richardson Highway and 3.3 mi north of Glennallen. Drainage area is 11.4 mi ² .	1963-2001	4- -01 4-27-01 9-03-01	f15.33 15.20 <14.52	u S/71 R/<39	5- -72	d25.88	546
McCarthy Creek at McCarthy (15210025)	Lat 61°25'54", long 142°55'02", in NW ¹ / ₄ NW ¹ / ₄ NE ¹ / ₄ sec. 19, T. 5 S., R. 14 E. (McCarthy B-6 quad), on right bank 1100 ft upstream from large boulder near footbridge at trail crossing at McCarthy, 0.8 mi upstream from mouth. Drainage area is 79.0 mi ² .	1994-2001	9-27-00 7-09-01 9-19 -01	j80.27 79.61 <78.93	geR/4,000 S/1,950 R/<850	9-27-00	j80.27	ge4,000
Boulder Creek near Tiekell (15212500)	Lat 61°20'08", long 145°18'26", in SE ¹ / ₄ SW ¹ / ₄ NW ¹ / ₄ sec. 19, T. 6 S., R. 1 E. (Valdez B-4 quad), on left downstream wingwall of bridge at mi 51.4 of old Richardson Highway, 0.2 mi downstream from culvert on present Richardson Highway, and 0.7 mi north of Tiekell. Drainage area is 9.80 mi ² .	1964-2001	6-14-01 7-06-01	10.38 10.55	S/284 R/407	8-07-81	11.72	1,330
Ptarmigan Creek Tributary near Valdez (15212800)	Lat 61°08'12", long 145°44'32", NW ¹ / ₄ NE ¹ / ₄ sec 34, T. 8 S., R. 3 W. (Valdez A-5 quad), on left bank 275 ft upstream from Richardson Highway, 21 mi east of Valdez. Drainage area is 0.72 mi ² .	1965-70 1996-2001	6- -01 9-05-01	f78.52 77.55	u R/42	9- -65	d10.82	85
Mineral Creek near Valdez (15227500)	Lat 61°08'30", long 146°21'42", in SW ¹ / ₄ NE ¹ / ₄ SE ¹ / ₄ sec. 30, T. 8 S., R. 6 W. (Valdez A-7 quad), on right bank 120 ft upstream from bridge, 1.8 mi upstream from mouth, and 0.5 mi northwest of Valdez. Drainage area is 44.0 mi ² .	i1976-81, 1990-2001	5-28-01 9-05-01	<11.40 <11.40	S/<1,520 R/<1,520	6- -76	di 90.81	5,570

Maximum discharge at crest-stage partial-record stations--Continued
 [Footnotes at end of table on p. 369]

Station name and number	Location and drainage area	Period of record	Water year 2001 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
SOUTH-CENTRAL ALASKA—Continued								
Shakespeare Creek at Whittier (15236200)	Lat 60°46'35", long 148°43'35", in NE ¹ / ₄ sec. 22, T. 8 N., R. 4 E. (Seward D-5 quad), on upstream right wingwall of concrete bridge 0.5 mi upstream from mouth, and 1.8 mi west of the Alaska railroad terminal building at Whittier. Drainage area is 1.61 mi ² .	1970-80, 1984-2001	6-28-01 8-29-01	<9.86 12.35	S/<282 R/528	9-20-95	14.90	690
Glacier Creek at Bruno Road near Seward (15237900)	Lat 60°10'49", long 149°22'46", in NW ¹ / ₄ sec.13, T. 1 N., R. 1 W. (Seward A-7 NE quad), Kenai Peninsula Borough, on left bank 25 ft upstream from Bruno Road bridge, and 5.6 mi northeast of Seward. Drainage area is indeterminate.	1987-2001	4-29-01 6-29-01 8-30-01	f8.96 7.76 8.61	u S/363 R/370	10-11-86	15.70	4,200
Fritz Creek near Homer (15239500)	Lat 59°42'30", long 151°20'35", in SW ¹ / ₄ SW ¹ / ₄ sec. 28, T. 5 S., R. 12 W. (Seldovia C-4 quad), Kenai Peninsula Borough, on right bank 25 ft downstream from culvert under East End Road, 8 mi east of Homer. Drainage area is 10.4 mi ² .	1963-85, ‡1986-92, 1993-2001	1-15-01 5-13-01	11.34 10.70	R/259 S/92	10-22-80	d 18.53	852
Anchor River near Anchor Point (15239900)	Lat 59°44'50", long 151°45'11", in NE ¹ / ₄ sec. 13, T. 5 S., R. 15 W., (Seldovia C-5 quad), Kenai Peninsula Borough, on right bank at downstream side of bridge on Sterling Highway, 4.3 mi southeast of Anchor Point. Drainage area is 137 mi ² .	‡1965-73 1974 ‡1978-86 1987 ‡1991-92 2000-01	11-11-00 2-27-01 5-29-01	3.68 f8.67 4.63	R/ 906 u S/ 1,690	11-29-83	d7.42	6,050
Premier Creek near Sutton (15283600)	Lat 61°42'40", long 149°05'12", in SE ¹ / ₄ NE ¹ / ₄ sec. 28, T. 19 N., R. 2 E. (Anchorage C-6 quad), on left bank 10 ft downstream from culvert under Buffalo Mine Road, 3.85 mi north from mi 53 Glenn Highway, and 7 mi northeast of Palmer. Drainage area is 3.38 mi ² .	1997-2001	4-29-01 5-27-01 9-06-01	f7.17 6.94 6.88	u S/28 R/24	9-22-00	7.14	47

Maximum discharge at crest-stage partial-record stations--Continued
 [Footnotes at end of table on p. 369]

Station name and number	Location and drainage area	Period of record	Water year 2001 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
SOUTH-CENTRAL ALASKA—Continued								
Wasilla Creek near Palmer (15285000)	Lat 61°38'37", long 149°11'46", in SE ¹ / ₄ SW ¹ / ₄ sec. 13, T. 18 N., R. 1 E. (Anchorage C-6 quad), Matanuska-Susitna Borough, on right bank 20 ft downstream from culverts on Wasilla Fishhook Road, and 4.1 mi northeast of Palmer. Drainage area is 16.8 mi ² .	1971, 1976-2001	4-29-01 9-06-01	7.36 <7.69	S/83 R/<119	8-10-71	d17.74	700
Nancy Lake Tributary near Willow (15290200)	Lat 61°41'17", long 149°57'58", in SE ¹ / ₄ SE ¹ / ₄ sec. 34, T. 19 N., R. 4 W. (Tyonek C-1 quad), Matanuska-Susitna Borough, on left bank 50 ft upstream from culvert at Parks Highway, 0.3 mi upstream from mouth and 4.5 mi southeast of Willow. Drainage area is 8.00 mi ² .	1980, 1983-87, 1989-2001	4- -01 4-24-01 8-16-01	f11.13 10.87 <10.00	u S/70 R/<22	10-11-86	13.21	465
Raft Creek near Denali (15291100)	Lat 63°03'04", long 147°16'22", in SE ¹ / ₄ sec. 36, T. 21 S., R. 2 E.(Healy A-1 quad), Matanuska-Susitna Borough, on right bank 30 ft upstream from culvert at mi 68.9 Denali Highway, and 10.7 mi southeast of Denali. Drainage area is 4.33 mi ² .	1963-2001	5-23-01 6-24-01 8-03-01	f13.48 10.61 10.62	u S/65 R/66	6- -64	11.72	133
Myrtle Creek near Kodiak (15297200)	Lat 57°36'12", long 152°24'12", in NW ¹ / ₄ SW ¹ / ₄ sec. 6, T. 30 S., R. 19 W. (Kodiak C-2 quad), Kodiak Island Borough, on left bank 0.1 mi upstream from bridge, 0.3 mi upstream from mouth, and 13 mi south of Kodiak. Drainage area is 4.74 mi ² .	‡1963-86, 1987-2001	5-21-01 9-22-01	3.82 5.70	S/217 R/832	1-03-77	6.93	1,350
Stapp Creek near Cold Bay (15297609)	Lat 55°11'17", long 162°42'47", in SE ¹ / ₄ SE ¹ / ₄ NW ¹ / ₄ sec. 1, T. 58 S., R. 89 W. (Cold Bay A-3 quad), Aleutians East Borough, on left bank, 0.9 mi upstream from mouth, and 1 mi. south of Cold Bay. Drainage area is 1.68 mi ² .	2001	10-24-00 3-29-01 2-15-01	15.67 f16.55 15.02	R/25 u S/5.1	10-24-00	15.67	25

Maximum discharge at crest-stage partial-record stations--Continued
 [Footnotes at end of table on p. 369]

Station name and number	Location and drainage area	Period of record	Water year 2001 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
SOUTH-CENTRAL ALASKA—Continued								
Frosty Creek near Cold Bay (15297810)	Lat 55°09'59", long 162°48'22", in SE ¹ / ₄ SW ¹ / ₄ SE ¹ / ₄ sec. 8, T. 58 S., R. 89 W. (Cold Bay A-3 quad), Aleutians East Borough, on left bank, 2.8 mi upstream from mouth, and 4.5 mi south-west of Cold Bay. Drainage area is 5.92 mi ²	2001	10-24-00	11.92	R/497	10-24-00	11.92	497
			4-02-01	11.61	S/392			
SOUTHWEST ALASKA								
Chinkelyes Creek Tributary near Pedro Bay (15300350)	Lat 59°44'02", long 153°48'40", in SE ¹ / ₄ NE ¹ / ₄ NE ¹ / ₄ sec. 23, T. 5 S., R. 27 W. (Iliamna C-3 quad), on left bank 60 ft upstream from culvert, 8 mi east of Pile Bay, and 11 mi east of Pedro Bay. Drainage area is 0.40 mi ² .	1997-2001	6-26-01	10.90	S/14	9-18-99	13.14	144
			7-19-01	11.19	R/23			
Moody Creek at Aleknagik (15302900)	Lat 59°16'34", long 158°35'42", in SE ¹ / ₄ sec. 30, T. 10 S., R. 55 W. (Dillingham B-7 quad), on left bank 10 ft upstream from culvert entrance, and 500 ft upstream from mouth at Wood River at the Aleknagik Mission. Drainage area is 1.28 mi ² .	1969-73, 1975-85, 1988-2001	4- -01	18.11	u	6-07-71	19.60	55
			5-13-01	17.76	S/10			
			7-15-01	17.97	R/ 14			
Gold Creek at Takotna (15303660)	Lat 62°59'20", long 156°04'08", in SE ¹ / ₄ SE ¹ / ₄ sec. 34, T. 34 N., R. 36 W. (Iditarod D-1 quad), at Takotna, on right bank, 350 ft upstream from bridge, and 400 ft upstream from mouth. Drainage area is 6.31 mi ² .	1987-2001	5- -01	17.47	u	5-16-99	8.30	131
			5-29-01	7.46	S/67			
			8-20-01	7.00	R/33			
YUKON ALASKA								
Dennison Fork near Tetlin Junction (15305900)	Lat 63°25'24", long 142°29'00", in SW ¹ / ₄ sec. 14, T. 19 N., R. 15 E. (Tanacross B-3 quad), on left bank 7 ft downstream from culverts at mi 10.7 Taylor Highway, and 8.3 mi northeast of Tetlin Junction. Drainage area is 2.93 mi ² .	1964-2001	n	n	n	7- -64	16.29	128

Maximum discharge at crest-stage partial-record stations--Continued
 [Footnotes at end of table on p. 369]

Station name and number	Location and drainage area	Period of record	Water year 2001 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
YUKON ALASKA—Continued								
King Creek near Dome Creek (15344000)	Lat 64°23'38", long 141°24'43", in NE ¹ / ₄ SW ¹ / ₄ sec. 16, T. 6 S., R. 32 E. (Eagle B-1 quad), on left bank 1,100 ft upstream from culvert at mi 119.8 Taylor Highway, 0.4 mi upstream from mouth, 4.9 mi east of Dome Creek, and 28 mi south of Eagle. Drainage area is 5.87 mi ² .	1975-82, ‡1983-90, 1991-2001	n	n	n	6-13-97	j17.65	n
Boulder Creek near Central (15439800)	Lat 65°34'05", long 144°53'13", in NW ¹ / ₄ sec. 32, T. 9 N., R. 14 E. (Circle C-2 quad), on right bank 2,000 ft upstream from bridge at mi 125.4 Steese Highway, 0.7 mi upstream from mouth, and 2.3 mi west of Central. Drainage area is 31.3 mi ² .	1964-65, ‡1966-82, 1983, ‡1984-86, 1987-2001	5-17-01 5-23-01 7-07-01	f7.6 d38.59 7.56	u S/243 R/583	6-25-89	10.01	1,460
Quartz Creek near Central (15442500)	Lat 65°37'09", long 144°28'55", in SW ¹ / ₄ sec. 7, T. 9 N., R. 16 E. (Circle C-1 quad), on left bank 10 ft upstream from culvert at mi 138.1 on Steese Highway, 1 mi upstream from mouth, 19 mi southwest of Circle, and 10 mi east of Central. Drainage area is 17.2 mi ² .	1967, 1969-79, 1989-2001	n	n	n	7-15-95	dj23.08	700
Ray River Tributary near Stevens Village (15453610)	Lat 65°56'57", long 149°54'55", in SE ¹ / ₄ sec. 17, T. 13 N., R. 11 W. (Livengood D-6 quad), on right bank 10 ft upstream from culvert at mi 63.6 on the Dalton Highway, and 22 mi west of Stevens Village. Drainage area is 8.00 mi ² .	1977-2001	n	n	n	5- -79	d 21.10	860
Little Jack Creek near Nabesna (15470300)	Lat 62°32'39", long 143°19'22", in SW ¹ / ₄ NW ¹ / ₄ SE ¹ / ₄ sec. 22, T. 9 N., R. 11 E. (Nabesna C-5 quad), on left bank 8 ft upstream from the culvert at mi 25.8 Nabesna Road, and 15.6 mi northeast of Nabesna (previously 0.2 mi upstream on left bank). Drainage area is 6.73 mi ²	1975-2001	6-29-00 6-11 -01 7-25-01	18.34 <17.53 21.42	gR/76 S/<69 R/254	5- -79	d 21.10	860

Maximum discharge at crest-stage partial-record stations--Continued
 [Footnotes at end of table on p. 369]

Station name and number	Location and drainage area	Period of record	Water year 2001 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
YUKON ALASKA—Continued								
Berry Creek near Dot Lake (15476300)	Lat 63°41'23", long 144°21'47", in NW ¹ / ₄ sec. 13, T. 22 N., R. 5 E. (Mt. Hayes C-1 quad), on left bank 100 ft upstream from former bridge site, at mi 1371.4 on abandoned section of Alaska Highway, 1.9 mi upstream from mouth, and 6.0 mi west of Dot Lake. Drainage area is 65.1 mi ² .	1964-71, ‡1972-81, 1982-2001	5-16-01 9-03-01	12.63 12.19	S/802 R/593	7-19-64	15.49	2,800
Suzy Q Creek near Pump Station 10 (15478093)	Lat 63°29'43", long 145°51'27", in SW ¹ / ₄ sec. 29, T. 16 S., R. 10 E. (Mt. Hayes B-4 quad), on right bank 30 ft upstream from bridge at mi 224.8 on Richardson Highway, 0.1 mi upstream from mouth, and 6 mi north of Pump Station 10. Drainage area is 1.29 mi ² .	1987, 1989-2001	n	n	n	7-14-87	33.83	1,070
Ruby Creek above Richardson Highway near Donnelly (15478499)	Lat 63°37'54", long 145°52'14", in NE ¹ / ₄ sec. 7, T. 15 S., R. 10 E. (Mt. Hayes C-4 quad), on left bank 0.2 mi upstream from Trans-Alaska Pipeline, 0.5 mi upstream from bridge at mi 234.8 on Richardson Highway, 2.2 mi upstream from mouth, and 2.3 mi south of Donnelly. Drainage area is 4.89 mi ² .	1987-2001	n	n	n	7-14-87	16.95	1,660
Banner Creek at Richardson (15480000)	Lat 64°17'24", long 146°20'56", in SW ¹ / ₄ sec. 22, T. 7 S., R. 7 E. (Big Delta B-5 quad), on left bank 400 ft upstream from bridge at mi 295.4 Richardson Highway, 0.2 mi upstream from mouth, and 0.4 mi northwest of Richardson. Drainage area is 20.2 mi ² .	1964-2001	4-27-01 5-24-01 7-30-01	fj17.1 f15.34 14.10	u S/u R/116	6-26-89	16.38	950
Slime Creek near Cantwell (15516200)	Lat 63°30'34", long 148°48'39", in SE ¹ / ₄ sec. 24, T. 16 S., R. 7 W. (Healy C-4 quad), on right bank 25 ft downstream from culverts at mi 219.9 George Parks Highway, and 9.1 mi northeast of Cantwell. Drainage area is 6.90 mi ² .	1966-2001	4- -01 6-24-01 8-03-01	f18.31 17.05 17.31	u S/84 R/126	7- -67	d14.52	685

Maximum discharge at crest-stage partial-record stations--Continued
 [Footnotes at end of table on p. 369]

Station name and number	Location and drainage area	Period of record	Water year 2001 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
YUKON ALASKA—Continued								
Dragonfly Creek near Healy (15517980)	Lat 63°47'45", long 148°55'19", in SW ¹ / ₄ SE ¹ / ₄ SW ¹ / ₄ sec. 9, T. 13 S., R. 7 W. (Healy D-4 quad), on left bank at mi 242.6 George Parks Highway 100 ft upstream from highway bridge, and 6 mi southeast of Healy. Drainage area is 0.71 mi ² .	1990-2001	n	n	n	7-12-90	d7.59	535
Globe Creek near Livengood (15541600)	Lat 65°17'08", long 148°07'56", in SE ¹ / ₄ sec. 3, T. 5 N., R 3 W. (Livengood B-3 Quad), 0.1 mi upstream from culvert at mi 37.6 Elliot Highway, 9 mi upstream from mouth, and 19 mi southeast of Livengood. Drainage area is 23.0 mi ² .	1964-2001	5-22-01 8-16-01	14.12 j15.12	S/189 R/361	8-12-67	17.05	1,240
Snowden Creek near Wiseman (15564868)	Lat 67°44'20", long 149°44'24", in SW ¹ / ₄ sec. 26, T. 34 N., R. 10 W. (Chandalar C-6 quad), on right bank 0.25 mi upstream from culvert at mi 213.5 of the Dalton Highway, and 24.5 mi northeast of Wiseman. Drainage area is 16.7 mi ² .	1968, d1977-79, 1992-2001	n	n	n	1968	u	1,200
Nugget Creek near Wiseman (15564872)	Lat 67°29'25", long 149°52'20", in NW ¹ / ₄ sec. 30, T. 31 N., R. 10 W. (Chandalar B-6 quad), on left bank 1,000 ft upstream from culvert at mi 195.6 Dalton Highway, and 8.7 mi northeast of Wiseman. Drainage area is 9.47 mi ² .	d1975-88, d1990-92, 1993-2001	n	n	n	5-26-98	40.17	540
Prospect Creek near Prospect Camp (15564884)	Lat 66°46'56", long 150°41'06", in NW ¹ / ₄ sec. 31, T. 23 N., R. 14 W. (Bettles D-2 quad), on left bank 200 ft upstream from bridge at mi 135.2 on the Dalton Highway, 0.4 mi downstream from Trans-Alaska Pipeline crossing, 1.5 mi upstream from mouth, 2.1 mi south of Pump Station 5, and 1.5 mi southeast of Prospect Camp. Drainage area is 110 mi ² .	1968, 1975-2001	n	n	n	1968	d10.22	6,800

Maximum discharge at crest-stage partial-record stations--Continued
 [Footnotes at end of table on p. 369]

Station name and number	Location and drainage area	Period of record	Water year 2001 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
YUKON ALASKA—Continued								
Bonanza Creek Tributary near Prospect Camp (15564887)	Lat 66°36′52″, long 150°41′24″, in SE¼ sec. 25, T. 21 N., R. 15 W. (Bettles C-2 quad), on right bank 0.3 mi downstream from culverts at mi 121 on the Dalton Highway, 3.4 mi upstream from mouth, 13.5 mi south of Pump Station 5, and 12.6 mi south of Prospect Camp. Drainage area is 11.7 mi ² .	1975-2001	5-21-01	f19.20	u	5-15-93	19.89	290
			6-03-01	18.78	S/141			
			8-14-01	18.73	R/137			
Indian River at Utopia (15564950)	Lat 65°59′49″, long 153°41′V B31″, in NW¼ sec. 19, T. 7 N., R. 25 E. (Melozitna D-2 quad), on right bank, 200 ft downstream of bridge at mi 0.2 on road to Indian Mountain. Drainage area is 38.8 mi ² .	1998-2001	5-29-01	f18.58	u	8-20-98	18.7	828
			6-07-01	17.53	S/410			
			8-14-01	18.04	R/567			
Utopia Creek at Utopia (15564960)	Lat.65°59′26″, long 153°41′ 44″, in SW¼ sec. 19, T. 7 N., R. 25 E. (Melozitna D-2 quad), on right bank, 460 ft downstream of 4 wheeler crossing west of airstrip, .5 mi above mouth, .3 mi south-southeast of Utopia, 5.4 mi south of Indian Mt, and 16 mi east-southeast of Hughes. Drainage area is 5.18 mi ² .	1999-2001	5-13-99	g 6.54	g S/49	6-7-01	6.98	102
			7-20-99	g 6.35	g R/33			
			5-17-00	gfj 8.31	u			
			5-31-00	gf6.76	gS/u			
			7-21-00	g6.72	gR/69			
			5-18-01	af8.8	u			
			6-7-01	6.98	S/102			
			8-14-01	6.59	R/54			
Municipal Reserve Creek at Pilot Station (15565449)	Lat 61°56′19″, long 162°52′53″, in NW¼ SE¼ sec. 5, T. 21 N., R. 74 W. (Marshall D-3 quad), on right bank 0.3 mile upstream from mouth, and 0.1 mile north-east of Village of Pilot Station. Drainage area is 1.43 mi ² .	1993-97 2001	5-16-01	f7.95	u	8-26-94	8.71	12
			6-03-01	6.10	S/2.3			
			8-31-01	7.49	R/6.5			

Maximum discharge at crest-stage partial-record stations--Continued
 [Footnotes at end of table on p. 369]

Station name and number	Location and drainage area	Period of record	Water year 2001 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
NORTHWEST ALASKA								
Chiroskey River near Unalakleet (15565730)	Lat 63°55'06", long 160°18'58", in NW¼ sec. 19, T. 18 S., R. 8 W. (Unalakleet D-3 quad), on left bank ¾ mile upstream from mouth, 14 miles northeast of Unalakleet. Drainage area is 296 mi ² .	1998-2001	5- -98 8-01-99 6-02-00 9-07-00 5- -01 6-09-01 7-21-01	46.13 46.98 45.56 47.03 f48.73 46.75 45.39	gS/1,070 gR/1,490 gS/810 gR/1,520 u S/1,370 R/740	9-07-00	47.03	1,520
Goldengate Creek near Nome (15585000)	Lat 64°26'51", long 165°03'14", in SW¼ sec. 15, T. 12 S., R. 32 W. (Nome B-1 quad), on right bank 500 ft upstream from culvert on Nome-Council Road, and 11 mi southeast of Nome. Drainage area is 1.55 mi ² .	1965, 1977-84, 1986-2001	a5-15-01 6-06-01 8-14-01	f 14.40 11.10 11.36	u S/17 R/27	9-08-65	d11.70	63
Arctic Creek above Tributary near Nome (15624998)	Lat 64°38'16", long 165°42'42", in NE¼ sec. 8, T. 10 S., R. 35 W. (Nome C-2 quad), on right bank 300 ft upstream from culvert on Nome-Teller Road, 2 mi upstream from mouth, and 13 mi northwest of Nome. Drainage area is 1.13 mi ² .	1975, 1979-2001	7-06-01 7-13-01 8-14-01	f 19.47 18.19 17.79	u S/43 R/10	8-20-98	19.06	182
Washington Creek near Nome (15633000)	Lat 64°42'52", long 165°49'13", in NW¼ sec. 14, T. 9 S., R. 35 W. (Nome C-2 quad), on left bank, 400 ft upstream from culvert on Nome-Teller Road, and 19 mi northwest of Nome. Drainage area is 6.34 mi ² .	1964-2001	6-18-01 7-06-01 8-14-01	f 24.00 20.23 19.70	u S/70 R/32	7-10-75	d19.35	620
Eldorado Creek near Teller (15635000)	Lat 64°57'38", long 166°11'59", in NE¼ NE¼ sec. 20, T. 6 S., R. 37 W. (Nome D-3 quad), on right bank 30 ft downstream from bridge on Nome-Teller Road, at mi 46.3 of the Nome-Teller Road, 0.5 mi upstream from mouth at Tisuk River, and 21 mi south of Teller. Drainage area is 5.83 mi ² .	1986-87, ‡1988-90, 1991, ‡1992-98, 1999-2001	6-18-01 7-06-01 8-14-01	10.09 9.00 9.00	u S/292 R/292	9-04-86	9.42	600

Maximum discharge at crest-stage partial-record stations--Continued
 [Footnotes at end of table on p. 369]

Station name and number	Location and drainage area	Period of record	Water year 2001 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
NORTHWEST ALASKA-Continued								
North Fork Red Dog Creek near Kivalina (15746988)	Lat 68°05′03″, long 162°52′52″, in NW¼ SW¼ sec. 18, T. 31 N., R. 18 W. (DeLong Mts. A-2 quad), on left bank 500 ft upstream from mouth, 1.1 mi northwest of Red Dog Mine mill site, 36 mi north of Noatak, and 50 mi northeast of Kivalina. Cominco Station 12. Drainage area is 15.9 mi ² .	‡1991-94, 1995-2001	n	n	n	8-17-94	6.03	900
Tutak Creek near Kivalina (15746998)	Lat 67°52′28″, long 163°40′14″, in NW¼ NE¼ sec. 34, T. 29 N., R. 22 W. (Noatak D-4 quad), on left bank, 1,000 ft upstream from mouth, 25 mi northeast of Kivalina, and 28 mi northwest of Noatak. Drainage area is 119 mi ² .	1992-2001	n	n	n	6-15-92	15.00	3,100
ARCTIC SLOPE ALASKA								
Atigun River Tributary near Pump Station 4 (15904900)	Lat 68°22′25″, long 149°18′48″, in NE¼ SE¼ sec. 28, T. 12 S., R. 12 E. (Phillip Smith Mt. B-4 quad), on right bank 0.2 mi upstream from bridge at mi 265 on Dalton Highway, 0.9 mi upstream from mouth, and 4 mi south of Pump Station 4. Drainage area is 32.6 mi ² .	1976, ‡1977-86, 1987-2001	6-9-01 7-5-01	12.83 12.81	S/371 R/366	7-17-99	15.51	1,650
Sagavanirktok River Tributary near Happy Valley Camp (15910300)	Lat 69°09′38″, long 148°49′40″, in NE¼ sec. 30, T. 3 S., R. 14 E. (Sagavanirktok A-4 quad), North Slope Borough, on right bank 500 ft upstream from culvert at mi 335.2 on the Dalton Highway, 0.8 mi upstream from mouth, 0.8 mi north of Happy Valley Camp, and 16 mi south of Sagwon. Drainage area is 12.7 mi ² .	1997-2001	n	n	n	5-19-98	22.09	223
Sagavanirktok River Tributary near Deadhorse (15918200)	Lat 69°57′14″, long 148°43′48″, in NW¼ NE¼ sec. 19, T. 1 N., R. 14 E. (Sagavanirktok D-3 quad), on right bank 6 ft upstream from culvert at mi 386.2 on the Dalton Highway, 0.4 mi upstream from mouth, and 23 mi south of Deadhorse. Drainage area is 12 mi ² , approximately.	1986, 1988-2001	n	n	n	5-24-96	111.8	142

FOOTNOTES

‡	Operated as a continuous record station	e	estimated
<	Less than	f	Ice affected
>	Greater than	g	Not previously published
R/	Rainfall	i	Data collected by Dept. of Transportation and Public Facilities
S/	Spring runoff	j	From floodmarks
a	Approximately	n	To be determined
d	At different site or datum	u	Unknown

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2001
[Footnotes at end on table of page 386]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
SOUTHEAST ALASKA						
15049900 Gold Creek near Juneau	Gastineau Channel	Lat 58°18'26", long 134°23'12", in NW ¹ / ₄ NE ¹ / ₄ , sec. 24, T. 41 S., R. 67 E. (Juneau B-2 SE quad), City and Borough of Juneau, at Old Ebner Dam site, at head of Last Chance Basin, 0.6 mi upstream from Basin Road bridge, and 1.1 mi east of Juneau.	8.41	(‡)1984-97, 1998-2000	+11-1500 +1-02-01 +2-08-01 +3-08-01 +5-31-01 +7-18-01 +8-13-01 +8-15-01 +9-10-01 +9-25-01	61 34 39 21 184 140 112 125 91 146
15052425 Jordan Creek Tribu- tary at Thunder Mt. Trailer Park near Auke Bay	Jordan Creek	Lat 58°23'33", long 134°33'15", in NW ¹ / ₄ NE ¹ / ₄ NW ¹ / ₄ , sec. 20, T. 40 S., R. 66 E. (Juneau B-2 NW quad), City and Borough of Juneau, at downstream end of Thunder Mt. Trailer Park, 15 ft upstream from mouth, 3.4 mi northeast of Auke Bay, and 8.7 mi northwest of Juneau.	--	1999-2000	4-10-01	no flow
15052430 Jordan Creek below Thunder Mt. Trailer Park near Auke Bay	Gastineau Channel	Lat 58°23'31", long 134°33'15", in SW ¹ / ₄ NE ¹ / ₄ NW ¹ / ₄ , sec. 20, T. 40 S., R. 66 E. (Juneau B-2 NW quad), City and Borough of Juneau, at downstream end of Thunder Mt. Trailer Park, 3.4 mi upstream from mouth, 3.4 mi northeast of Auke Bay, and 8.7 mi northwest of Juneau.	0.76	1998-2000	4-10-01	0.10
15052450 Jordan Creek at Amalga Street near Auke Bay	Gastineau Channel	Lat 58°23'14", long 134°33'40", in SW ¹ / ₄ SW ¹ / ₄ NW ¹ / ₄ , sec. 20, T. 40 S., R. 66 E. (Juneau B-2 NW quad), City and Borough of Juneau, at Amalga Street Bridge, 3.0 mi upstream from mouth, 3.1 mi east of Auke Bay, and 8.5 mi northwest of Juneau.	1.06	1997-2000	4-10-01 8-17-01	0.86 0.80
15052455 Jordan Creek at Jen- nifer Street near Auke Bay	Gastineau Channel	Lat 58°23'01", long 134°33'46", in NW ¹ / ₄ SW ¹ / ₄ SW ¹ / ₄ , sec. 20, T. 40 S., R. 66 E. (Juneau B-2 NW quad), City and Borough of Juneau, 25 ft upstream from footbridge at Jennifer Creek, behind Glacier Valley Grade School, 2.7 mi upstream from mouth, 3.1mi east of Auke Bay, and 8.5 mi northwest of Juneau.	1.64	1999	8-17-01	1.2
15052465 Jordan Creek at Nancy Street near Auke Bay	Gastineau Channel	Lat 58°22'32", long 134°34'21", in NE ¹ / ₄ SW ¹ / ₄ NE ¹ / ₄ , sec. 30, T. 40 S., R. 66 E. (Juneau B-2 SW quad), City and Borough of Juneau, 0.2 mi east of intersection of Mendenhall Loop Road and Nancy Street, 2 mi upstream from mouth, 3.1 mi east of Auke Bay, and 8.5 mi northwest of Juneau.	2.26	1999-2000	4-10-01 8-15-01	2.0 1.1

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2001
[Footnotes at end on table of page 386]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
SOUTHEAST ALASKA--Continued						
15052475 Jordan Creek below Egan Drive near Auke Bay	Gastineau Channel	Lat 58°21'59", long 134°34'34", in SW ¹ / ₄ SW ¹ / ₄ SE ¹ / ₄ , sec. 30, T. 40 S., R. 66 E. (Juneau B-2 SW quad), City and Borough of Juneau, at foot-bridge, 50 ft downstream from Egan Drive, 0.4 mi southeast of intersection of Egan Drive and Mendenhall Loop Road and 3.0 mi east of Auke Bay Post Office. Currently operated as a continuous-record station.	2.60	h1984-88, h1989, h1995-96, (‡)1997-2000	10-16-00 12-19-00 2-07-01 3-07-01 3-24-01 4-10-01 5-29-01 7-02-01 8-09-01 9-13-01	15 3.7 5.1 5.9 2.9 1.3 7.2 1.4 1.6 18
15052480 Jordan Creek near Auke Bay	Gastineau Channel	Lat 58°21'47", long 134°34'47", in SE ¹ / ₄ NE ¹ / ₄ NW ¹ / ₄ , sec. 31, T. 40 S., R. 66 E. (Juneau B-2 SW quad), City and Borough of Juneau, at Old Glacier Highway bridge, 0.9 mi upstream from mouth, and 3.0 mi southeast of Auke Bay.	2.67	1953-54, 1960, 1963- 65, 1967-68, 1997, 1999- 2000	4-10-01	1.4
15052483 Jordan Creek above Yandunkin Avenue near Auke Bay	Gastineau Channel	Lat 58°21'31", long 134°34'23", in SE ¹ / ₄ SW ¹ / ₄ NE ¹ / ₄ , sec. 31, T. 40 S., R. 66 E. (Juneau B-2 SW quad), City and Borough of Juneau, at foot-bridge about 100 ft upstream from Yandunkin Avenue, 0.5 mi upstream from mouth, and 3.4 mi southeast of Auke Bay.	--	1997-2000	4-10-01	0.93
15052700 Mendenhall River above Montana Creek near Auke Bay	Fritz Cove	Lat 58°22'52", long 134°35'43", in SW ¹ / ₄ SE ¹ / ₄ SE ¹ / ₄ , sec. 24, T. 40 S., R. 65 E. (Juneau B-2 NW quad), City and Borough of Juneau, 200 ft upstream of Montana Creek, 1.95 mi east of Auke Bay, and 2.1 mi upstream from mouth.	87.5	1965-66, 1968, 1984, 1989, 1997	4-13-01	61
15052815 Montana Creek at Mouth near Auke Bay	Mendenhall River	Lat 58°22'54", long 134°35'53", in SW ¹ / ₄ SE ¹ / ₄ SE ¹ / ₄ , sec 24, T. 40 S., R. 65 E. (Juneau B-2 NW quad), City and Borough of Juneau, at footbridge 200 ft upstream of mouth, 2 mi east of Auke Bay.	16.2	1965-66, 1968	4-13-01	22
15052900 + Mendenhall River at Brotherhood Bridge near Auke Bay	Fritz Cove	Lat 58°22'15", long 134°36'00", in NW ¹ / ₄ SE ¹ / ₄ , sec. 25, T. 40 S., R. 65 E. (Juneau B-2 SW quad), City and Borough of Juneau, at Egan Expressway bridge, 1.0 mi upstream from mouth, and 2.3 mi southeast of Auke Bay.	104	1950, 1961- 66, 1968, 1984, 1989, 1997, 1999	10-21-98 2-13-01 2-28-01 4-13-01 6-06-01	g7,990 165 211 97 1,540
15053170 Duck Creek at Taku Boulevard near Auke Bay	Mendenhall River	Lat 58°23'46", long 134°33'56", in SE ¹ / ₄ SE ¹ / ₄ , sec. 18, T. 40 S., R. 66 E. (Juneau B-2 NW quad), City and Borough of Juneau, 3.1 mi upstream from mouth, 3.1 mi east of Auke Bay, and 8 mi northwest of Juneau.	0.49	1988, 1993-2000	4-13-01	0.12
15053180 Duck Creek at Men- denhall Blvd near Auke Bay	Mendenhall River	Lat 58°23'34", long 134°34'06", in NE ¹ / ₄ NE ¹ / ₄ , sec. 19, T.40 S., R. 66 E. (Juneau B-2 NW quad), City and Borough of Juneau, 2.8 mi upstream from mouth, 2.9 mi east of Auke Bay, and 8 mi northwest of Juneau.	0.67	1988-89, 1993-98	4-13-01 8-17-01	0.58 0.73

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2001
[Footnotes at end on table of page 386]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
SOUTHEAST ALASKA--Continued						
15053185 Duck Creek at Duran Street near Auke Bay	Mendenhall River	Lat 58°23'24", long 134°34'25", in NE ¹ / ₄ SW ¹ / ₄ NE ¹ / ₄ , sec. 19, T. 40 S., R. 66 E. (Juneau B-2 NW quad), City and Borough of Juneau, 2.9 mi upstream from mouth, 3.0 mi east of Auke Bay, and 8 mi northwest of Juneau.	0.78	2000	8-17-01	0.41
15053190 Duck Creek at Steven Richards Blvd near Auke Bay	Mendenhall River	Lat 58°23'03", long 134°34'31", in NW ¹ / ₄ SE ¹ / ₄ , sec. 19, T. 40 S., R. 66 E. (Juneau B-2 NW quad), City and Borough of Juneau, 2.1 mi upstream from mouth, 2.7 mi east of Auke Bay and 8 mi northwest of Juneau.	0.88	1988,1993- 1998	8-17-01	0.49
15053191 Duck Creek above Kodzoff Trailer Park near Auke Bay	Mendenhall River	Lat 58°22'45", long 134°34'37", in NW ¹ / ₄ NW ¹ / ₄ NE ¹ / ₄ , sec. 30,T. 40 S., R. 66 E. (Juneau B-2 NW quad), City and Borough of Juneau, just upstream of Kodzoff Trailer Park, 0.3 mi upstream from mouth, and 2.6 mi east of Auke Bay.	1.20	1997-98	4-17-01	0.17
15053200 Duck Creek below Nancy Street near Auke Bay	Mendenhall River	Lat 58°22'31", long 134°34'38", in SW ¹ / ₄ NE ¹ / ₄ , sec. 30, T.40 S., R. 66 E. (Juneau B-2 NW quad), City and Borough of Juneau, 50 ft south of intersection of Nancy Street and Mendenhall Loop Road, 0.4 mi north of intersection of Egan Drive and Mendenhall Loop Road, 1.4 mi upstream from mouth, 2.7 mi southeast of Auke Bay, and 8 mi northwest of Juneau. Currently operated as a continuous-record station.	1.30	(‡)1994-2000	10-16-00 12-19-00 2-07-01 3-07-01 3-22-01 4-17-01 5-24-01 7-02-01 8-08-01 9-13-01 9-13-01	8.8 2.6 3.9 3.3 2.3 1.1 4.2 1.0 2.0 6.3 5.9
15056100 Skagway River at Skagway	Taiya Inlet	Lat 59°28'02", long 135°17'00", in NE ¹ / ₄ NW ¹ / ₄ , sec. 12, T. 28 S., R. 59 E. (Skagway B-1 quad), City of Skagway, at highway bridge, 1.0 mi upstream from mouth.	a145	(‡)1963-86	8-30-01	1,160
15056500 Chilkat River near Klukwan	Lynn Canal	Lat 59°24'55", long 135°55'45", in NE ¹ / ₄ NW ¹ / ₄ SW ¹ / ₄ , sec. 29, T. 28 S., R. 56 E. (Skagway B-3 quad), at Haines Highway bridge, 0.25 mi upstream from mouth of Klehine River, and 1.7 mi northwest of Klukwan.	a760	(‡)1959-61	8-28-01	6,180
15056545 Big Boulder Creek at mile 135 near Haines	Klehini River	Lat 59°26'01", long 136°11'34", in SE ¹ / ₄ NE ¹ / ₄ , sec. 22, T. 28 S., R. 54 E. (Skagway B-4 quad), at Haines Highway bridge, 0.5 mi upstream from mouth, and 30 mi northwest of Haines.	--	--	10-07-00 10-10-00	658 158
15081607 Threemile Creek Tributary below can- yon near Klawock	Threemile Creek	Lat 55°32'26", long 132°57'08", in SE ¹ / ₄ SW ¹ / ₄ NE ¹ / ₄ , sec. 16, T. 73 S., R. 82 E. (Craig C-3 quad), on Prince of Wales Island, in Tongass National Forest, at mouth of canyon, 0.37 mi upstream from mouth, and 5.2 mi east of Klawock.	1.41	--	12-07-00 2-13-01 4-22-01 7-10-01 8-30-01	13 6.2 9.4 17 9.0

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2001
[Footnotes at end on table of page 386]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
SOUTHEAST ALASKA--Continued						
15081608 Threemile Creek Tributary near Klawock	Threemile Creek	Lat 55°32'06", long 132°57'12", in NW ¹ / ₄ SW ¹ / ₄ SE ¹ / ₄ , sec. 16, T. 73 S., R. 82 E. (Craig C-2 quad), on Prince of Wales Island, in Tongass National Forest, 75 ft upstream from mouth at right bank of Threemile Creek, about 150 ft upstream from Threemile Creek gage, and 5.2 mi east of the city of Klawock.	--	1999-2000	12-07-00 2-13-01 4-22-01	29 12 16
15081611 Threemile Creek below Highway near Klawock	Klawock Lake	Lat 55°31'54", long 132°59'05", in NE ¹ / ₄ NE ¹ / ₄ NW ¹ / ₄ , sec. 20, T. 73 S., R. 82 E. (Craig C-3 quad), on Prince of Wales Island, in Tongass National Forest, at Hollis Highway crossing, 3,000 ft upstream from mouth, and 4.0 mi east of Klawock.	8.05	2000	12-07-00 2-13-01 4-22-01 7-10-01 8-29-01	82 120 39 84 52
15081616 Halfmile Creek below Highway near Klawock	Klawock Lake	Lat 55°32'59", long 133°01'44", in SW ¹ / ₄ SW ¹ / ₄ SE ¹ / ₄ , sec. 12, T. 73 S., R. 81 E. (Craig C-4 quad) On Prince of Wales Island, in Tongass National Forest, at Hollis Highway crossing, about 800 ft upstream from mouth, and 2.7 mi east of Klawock.	5.26	2000	12-07-00 2-13-01 4-22-01 7-10-01 8-30-01	24 137 17 41 17
15086250 Coffman Creek near Coffman Cove	Clarence Strait	Lat 55°59'31", long 132°52'12", in NW ¹ / ₄ SE ¹ / ₄ NW ¹ / ₄ , sec. 10, T. 68 S., R. 81 E. (Craig D-3 quad), on Prince of Wales Island, in Tongass National Forest, 33 feet upstream from bridge, 140 feet upstream from mouth and 1.5 miles south of Coffman Cove.	--	--	7-13-01	27
15087675 Wrinkleneck Creek at Mouth at Sitka	Swan Lake	Lat 57°03'21", long 135°19'59", in SE ¹ / ₄ NW ¹ / ₄ SW ¹ / ₄ , sec. 36, T. 55 S., R. 63 E. (Sitka A-4 SW quad), Greater Sitka Borough, on Baranof Island, in Tongass National Forest, 10 feet upstream from culvert under Lake Street, 50 ft upstream from mouth, 200 ft north of intersection of Lake Street and Degroff Streets in Sitka.	--	--	5-19-01	1.3
15087682 Swan Lake Outlet at Sitka	Crescent Bay	Lat 57°03'16", long 135°20'02", in SW ¹ / ₄ NW ¹ / ₄ SW ¹ / ₄ , sec. 36, T. 55 S., R. 63 E. (Sitka A-5 SE quad) Greater Sitka Borough, on Baranof Island, in Tongass National Forest, 10 ft upstream of culvert entrance at outlet of Swan Lake at southern end of lake, 50 ft north of intersection of Halibut Point Road, Sawmill Creek Boulevard, and Lake Streets in Sitka.	--	--	5-19-01	1.2
15087695 Indian River above CBS Pumphouse near Sitka	Crescent Bay	Lat 57°03'34", long 135°18'15", in SE ¹ / ₄ SW ¹ / ₄ NW ¹ / ₄ , sec. 31, T. 55 S., R. 64 E. (Sitka A-4 quad), Greater Sitka Borough, on Baranof Island, 50 ft upstream from City and Borough of Sitka diversion to pump pond, 200 ft northeast of end of road and pumphouse, 0.9 mi northeast of Sitka, and 1.2 mi upstream from mouth.	11.4	1999-2000	5-13-01	63

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2001
[Footnotes at end on table of page 386]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
SOUTHEAST ALASKA--Continued						
15087730 Indian River Diversion to Sheldon Jackson College at Sawmill Creek Road at Sitka	Indian River	Lat 57°03'13", long 135°19'04", in NE ¹ / ₄ SW ¹ / ₄ SE ¹ / ₄ , sec. 36, T. 55 S., R. 63 E. (Sitka A-4 quad), Greater Sitka Borough, on Baranof Island, in Tongass National Forest, on left bank at entrance to a box culvert under Sawmill Creek Road, 12 ft downstream from end of a 42-in. diversion pipe, about 1,000 ft upstream from Sheldon Jackson College campus, and about 1,500 ft downstream from point of diversion.	--	1998, (‡)1999-2000	3-13-01 6-14-01	8.7 13
15087810 Sawmill Creek below Upper Tailrace near Sitka	Silver Bay	Lat 57°03'40", long 135°12'35", in NE ¹ / ₄ SE ¹ / ₄ NE ¹ / ₄ , sec. 34, T. 55 S., R. 64 E., (Sitka A-4 quad), on Baranof Island, in Tongass National Forest, at footbridge crossing at campground, 240 ft downstream from upper powerplant tailrace, 0.35 mi downstream from dam at Blue Lake, 1.2 mi upstream from mouth and 4.6 mi east of Sitka.	38.0	1994-95, 1998-2000	11-9-00	60
15088400 Cupola Peak Creek at Bear Cove near Sitka	Bear Cove	Lat 57°00'39", long 135°09'11", in NE ¹ / ₄ SE ¹ / ₄ SE ¹ / ₄ , sec. 13, T. 56 S., R. 64 E. (Sitka A-4 quad), on Baranof Island, in the Tongass National Forest, 200 ft downstream from Green Lake Road crossing, 400 ft upstream from mouth at south shore of Bear Cove in Silver Bay, and about 7.1 mi southeast of Sitka.	0.43	‡2000	11-08-00 1-06-01 4-05-01 5-17-01 7-23-01	no flow-d no flow-d no flow-d no flow-d no flow-d
15109029 + Upper Peterson Creek near Auke Bay	Stephens Passage	Lat 58°16'27", long 134°38'58", in NE ¹ / ₄ SW ¹ / ₄ NE ¹ / ₄ , sec. 32, T. 41 S., R. 66 E. (Juneau B-2 SW quad), City and Borough of Juneau, on Douglas Island, Tongass National Forest, 2.20 mi upstream from mouth, 7.4 mi south of Auke Bay, and 9.0 mi west of Douglas.	0.43	--	4-05-01 7-12-01	0.40 2.1
15109031 + Peterson Creek Tributary No. 8 near Auke Bay	Peterson Creek	Lat 58°16'25", long 134°39'02", in NE ¹ / ₄ SW ¹ / ₄ NE ¹ / ₄ , sec. 32, T. 41 S., R. 66 E. (Juneau B-2 SW quad), City and Borough of Juneau, on Douglas Island, Tongass National Forest. 10 ft upstream from mouth at a point 2.11 mi upstream from mouth of Peterson Creek, 7.4 mi south of Auke Bay, and 9.0 mi west of Douglas.	0.39	--	4-05-01 7-12-01	0.37 0.19
15109033 + Peterson Creek Tributary No. 7 near Auke Bay	Peterson Creek	Lat 58°16'30", long 134°39'06", in NE ¹ / ₄ SW ¹ / ₄ NE ¹ / ₄ , sec. 32, T. 41 S., R. 66 E. (Juneau B-2 SW quad), City and Borough of Juneau, on Douglas Island, Tongass National Forest, 10 ft upstream from mouth at a point 2.03 mi upstream from mouth of Peterson Creek, 7.4 mi south of Auke Bay, and 9.1 mi west of Douglas.	0.82	--	4-05-01 7-12-01	0.05 0.12

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2001
[Footnotes at end on table of page 386]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
SOUTHEAST ALASKA--Continued						
15109035 + Peterson Creek Trib- utary No. 6 near Auke Bay	Peterson Creek	Lat 58°16'36", long 134°39'11", in SW ¹ / ₄ NW ¹ / ₄ NE ¹ / ₄ , sec. 32, T. 41 S., R. 66 E. (Juneau B-2 SW quad), City and Borough of Juneau, on Douglas Island, Tongass National Forest, 10 ft upstream from mouth, at a point 1.85 mi upstream from mouth of Peterson Creek, 7.4 mi south of Auke Bay, and 9.1 mi west of Douglas.	0.16	--	4-05-01 7-12-01	0.16 1.1
15109039 + Peterson Creek Trib- utary No. 4 near Auke Bay	Peterson Creek	Lat 58°16'43", long 134°39'26", in NE ¹ / ₄ NE ¹ / ₄ NW ¹ / ₄ , sec. 32, T. 41 S., R. 66 E. (Juneau B-2 SW quad), City and Borough of Juneau, on Douglas Island, Tongass National Forest, 8 ft upstream from mouth, at a point 1.65 mi upstream from mouth of Peterson Creek, 7.4 mi south of Auke Bay, and 9.2 mi west of Douglas.	1.04	--	4-05-01 7-12-01	0.37 0.91
15109041 + Peterson Creek Trib- utary No. 3 near Auke Bay	Peterson Creek	Lat 58°16'51", long 134°39'35", in SW ¹ / ₄ SE ¹ / ₄ SW ¹ / ₄ , sec. 29, T. 41 S., R. 66 E. (Juneau B-2 SW quad), City and Borough of Juneau, on Douglas Island, Tongass National Forest, 10 ft upstream from mouth, at a point 1.48 mi upstream from mouth of Peterson Creek, 7.3 mi south of Auke Bay, and 9.3 mi west of Douglas.	0.48	--	4-05-01 7-12-01	0.40 0.83
15109043 Peterson Creek Trib- utary No. 2 near Auke Bay	Peterson Creek	Lat 58°16'56", long 134°39'42", in NE ¹ / ₄ SW ¹ / ₄ SW ¹ / ₄ , sec. 29, T. 41 S., R. 66 E. (Juneau B-2 SW quad), City and Borough of Juneau, on Douglas Island, Tongass National Forest, 8 ft upstream from mouth, at a point 1.39 mi upstream from mouth of Peterson Creek, 7.3 mi south of Auke Bay, and 9.4 mi west of Douglas.	0.08	--	4-05-01	0.06
15109045 + North Fork Peterson Creek near Auke Bay	Peterson Creek	Lat 58°16'49", long 134°39'28", in SE ¹ / ₄ SE ¹ / ₄ SW ¹ / ₄ , sec. 29, T. 41 S., R. 66 E. (Juneau B-2 SW quad), City and Borough of Juneau, on Douglas Island, Tongass National Forest, 300 ft upstream from mouth, 7.3 mi south of Auke Bay, and 9.5 mi west of Douglas.	r1.59	(†)1985-87, (†)1997-2000	10-6-00 11-14-00 4-05-01 5-25-01 7-12-01	10 2.8 1.1 2.3 1.8
15129590 Ophir Creek at Air- port Road at Yakutat	Tawah Creek	Lat 59°32'28", long 139°43'18", in SE ¹ / ₄ SE ¹ / ₄ SW ¹ / ₄ , sec. 30, T. 27 S., R. 34 E. (Yakutat C-5 SW quad), in Tongass National Forest, at air- port road crossing 2.5 mi upstream from Sum- mit Lake, and 0.9 mi south of Yakutat.	--	1989, 1992-2000	6-19-01	0.17
15129600 Ophir Creek near Yakutat	Tawah Creek	Lat 59°31'26", long 139°44'37", in SW ¹ / ₄ NW ¹ / ₄ NE ¹ / ₄ , sec. 1, T. 28 S., R. 33 E. (Yakutat C-5 SW quad), in Tongass National Forest, 0.8 mi upstream from Summit Lake, and 2 mi south of Yakutat. Currently operated as a continuous- record station.	a2.5	(‡)1992-2000	11-30-00 2-03-01 4-25-01 6-19-01	36 39 17 2.4
15129615 Ophir Creek tributary at confluence near Yakutat	Ophir Creek	Lat 59°31'04", long 139°44'43", in NW ¹ / ₄ NW ¹ / ₄ NE ¹ / ₄ , sec. 1, T. 28 S., R. 33 E. (Yakutat C-5 SW quad), in Tongass National Forest, at confluence with Ophir Creek, and 2.3 mi south of Yakutat.	--	1992-2000	6-19-01	0.06

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2001
[Footnotes at end on table of page 386]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
SOUTH-CENTRAL ALASKA						
15200400 Gulkana River at Gulkana	Copper River	Lat 62°16'08", long 145°23'52", in SE ¹ / ₄ , sec. 27, T. 6 N., R. 1 W. (Gulkana B-3 quad), at mile 126.9 Richardson Highway.	1,966	1948-50 1954 1957-60 1965-66 1970-71 1998	8-23-01	997
15201000 Dry Creek near Glennallen	Copper River	Lat 62°08'49", long 145°28'31", in NE ¹ / ₄ , sec. 7, T. 4 N., R. 1 W. (Gulkana A-3 quad), 135 ft upstream from culvert at mi 119 Richardson Highway and 3.3 mi north of Glennallen.	11.4	†1963-2000	5-11-01	32
15202000 Tazlina River near Glennallen	Copper River	Lat 62°03'18", long 145°25'30", in SW ¹ / ₄ , sec. 9, T. 3 N., R. 1 W. (Gulkana A-3 quad), at bridge, 115.3 Richardson Highway, 5 mi south-east of Glennallen.	a2,670	‡1949-72 1997-99	7-18-01	15,800
15210025 McCarthy Creek at McCarthy	Kennicott River	Lat 61°25'54", long 142°55'02", in NW ¹ / ₄ NW ¹ / ₄ NE ¹ / ₄ , sec. 19, T. 5 S., R. 14 E. (McCarthy B-6 quad), 1100 ft upstream from large boulder near footbridge at trail crossing at McCarthy, 0.8 mi upstream from mouth.	79.0	†1993-2000	9-27-00 5-31-01	ge4,000 464
15212500 Boulder Creek near Tiekell	Tiekell River	Lat 61°20'08", long 145°18'26", in SE ¹ / ₄ SW ¹ / ₄ NW ¹ / ₄ , sec. 19, T. 6 S., R. 1 E. (Valdez B-4 quad), at mi 51.4 on the former Richardson Highway.	9.80	†1964-2000	7-24-01	70
15212800 Ptarmigan Creek Tributary near Valdez	Ptarmigan Creek	Lat 61°08'12", long 145°44'32", NW ¹ / ₄ NE ¹ / ₄ , sec 34, T. 8 S., R. 3 W. (Valdez A-5 quad), 275 ft upstream from Richardson Highway, 21 mi east of Valdez.	0.72	†1965-70 †1995-2000	7-24-01	11
15227500 Mineral Creek near Valdez	Port Valdez	Lat 61°08'30", long 146°21'42", in SW ¹ / ₄ NE ¹ / ₄ SE ¹ / ₄ , sec. 30, T. 8 S., R. 6 W. (Valdez A-7 quad), 120 ft upstream from bridge, 1.8 mi above mouth, and 0.5 mi northwest of Valdez.	44.0	1913, 1948-50, 1972-73, †1990-2000	9-19-01	372
15236200 Shakespeare Creek at Whittier	Passage Channel	Lat 60°46'35", long 148°43'35", in NE ¹ / ₄ , sec. 22, T. 8 N., R. 4 E. (Seward D-5 quad), at bridge 0.5 mi upstream from mouth, and 1.8 mi west of the Alaska Railroad terminal building at Whittier.	1.61	1969, †1970-80, †1985-2000	6-25-01	77
601105149385100 Exit Glacier Creek Tributary at mile 0.6 of Harding Trail near Seward	Exit Glacier Creek	Lat 60°11'05", long 149°38'51", in NW ¹ / ₄ NW ¹ / ₄ NW ¹ / ₄ , sec. 16, T. 1 N., R. 2 W. (Seward A-8 quad), Kenai Peninsula Borough, at footbridge at mi. 0.64 Harding Ice Field Trail, 8 mi. north-west of Seward.	--	--	7-27-01 8-06-01 8-20-01 9-11-01 9-25-01	8.4 5.7 7.0 3.0 4.2
601105149382400 Exit Glacier Creek channel at mile 0.1 of Harding Trail near Seward	Resurrection River	Lat 60°11'05", long 149°38'24", in NE ¹ / ₄ NW ¹ / ₄ NW ¹ / ₄ , sec. 16, T. 1 N., R. 2 W. (Seward A-8 quad), Kenai Peninsula Borough, 50 ft. west of mi. 0.05 of Harding Ice Field Trail, 8 mi. north-west of Seward.	--	--	7-27-01 8-06-01 8-20-01 9-11-01 9-25-01	21 25 11 1.1 3.8

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2001
[Footnotes at end on table of page 386]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
SOUTH-CENTRAL ALASKA--Continued						
601143149353400 Exit Glacier Creek Distributary at Exit Glacier Road near Seward	Resurrection River	Lat 60°11'43", long 149°35'34", in SE ¹ / ₄ NE ¹ / ₄ NE ¹ / ₄ , sec. 10, T. 1 N., R. 2 W. (Seward A-7 quad), Kenai Peninsula Borough, 200 ft. west of Exit Glacier Road bridge, 7 mi. northwest of Seward	--	--	7-11-01	5.4
15237900 Glacier Creek at Bruno Road near Seward	Resurrection River	Lat 60°10'49", long 149°22'46", in NW ¹ / ₄ , sec.13, T. 1 N., R. 1 W. (Seward A-7 quad), Kenai Peninsula Borough, at Bruno Road bridge, 5.6 mi northeast of Seward.	--	†1987-2000	7-13-01 9-21-01	158 102
15239500 Fritz Creek near Homer	Kachemak Bay	Lat 59°42'30", long 151°20'35", in SW ¹ / ₄ SW ¹ / ₄ , sec. 28, T. 5 S., R. 12 W. (Seldovia C-4 quad), 25 ft downstream from culvert on East Road, and 8 mi northeast of Homer.	10.4	†1963-66, †f 1967-70, †1971-77, †f 1978-80 †+1981-85, ‡1986-92 †1993-2000	1-24-01 4-19-01 4-25-01 5-16-01	33 36 53 63
594507151290000 Beaver Creek 2 miles above mouth near Bald Mountain near Homer	Anchor River	Lat 59°45'02", long 151°29'07", SW ¹ / ₄ SW ¹ / ₄ , sec. 10, T. 5 S., R. 13 W. (Seldovia D-4 quad), Kenai Peninsula Borough, 2 mi. upstream from mouth, and 8 mi. northeast of Homer.	18.3	--	4-19-01 8-29-01	26 25
594734151142900 Anchor River near Bald Mountain near Homer	Cook Inlet	Lat 59°47'34", long 151°14'29", NW ¹ / ₄ NW ¹ / ₄ , sec. 31, T. 4 S., R. 11 W. (Seldovia D-4 quad), Kenai Peninsula Borough, 1000 ft. upstream from unnamed tributary, and 16.5 mi. northeast of Homer.	3.73	--	4-24-01	382
595126151391000 Chakok River 7.5 miles above mouth near Anchor Point	North Fork Anchor River	Lat 59°51'26", long 151°39'18", NE ¹ / ₄ SW ¹ / ₄ , sec. 3, T. 4 S., R. 14 W. (Seldovia D-5 quad), Kenai Peninsula Borough, 300 ft. downstream from unnamed tributary, 7.5 mi. from mouth, and 8.5 mi. northeast of Anchor Point.	21.4	--	4-24-01 8-23-01	126 16
15239840 Anchor River above Twitter Creek near Homer	Cook Inlet	Lat 59°43'08", long 151°38'31", in NE ¹ / ₄ SW ¹ / ₄ , sec. 27, T. 5 S., R. 14 W. (Seldovia C-5 quad), Kenai Peninsula Borough, 30 ft upstream from Twitter Creek, and 6.3 mi northwest of Homer.	r104	f1978-80	8-20-01	233
15239900 Anchor River near Anchor Point	Cook Inlet	Lat 59°44'50", long 151°45'11", in NE ¹ / ₄ , sec. 13, T. 5 S., R. 15 W. (Seldovia C-5 quad), Kenai Peninsula Borough, at bridge on Sterling Highway, 4.3 mi southeast of Anchor Point.	137	‡1965-73 †1974 ‡1978-86 †1987 ‡1991-92 1996, 1999, 2000	7-18-01	147
15240000 + Anchor River at Anchor Point	Cook Inlet	Lat 59°46'21", long 151°50'05", in NE ¹ / ₄ NW ¹ / ₄ SE ¹ / ₄ , sec. 4, T.5 S., R.15 W. (Seldovia C-5 quad), Kenai Peninsula Borough, at Old Ster- ling Highway bridge at Anchor Point, 0.1 mi downstream from North Fork, and 1 mi upstream from mouth.	224	‡1953-66 f1978-80 †1984-92 1990-91	4-16-01 8-20-01	690 513

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2001
[Footnotes at end on table of page 386]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
SOUTH-CENTRAL ALASKA--Continued						
595506151403300 + Stariski Creek 2 miles below unnamed tributary near Ninilchik	Cook Inlet	Lat 59°55'02", long 151°40'40", in NW ¹ / ₄ NW ¹ / ₄ , sec. 15, T. 3 S., R. 14 W. (Seldovia D-5 quad), Kenai Peninsula Borough, 0.8 mi. upstream from unnamed tributary, and 11.5 mi. northeast of Anchor Point.	27.4	--	4-20-01 8-24-01	48 22
15240300 + Stariski Creek near Anchor Point	Cook Inlet	Lat 59°51'04", long 151°47'23", in NW ¹ / ₄ NW ¹ / ₄ , sec. 12, T. 4 S., R. 15 W. (Seldovia D-5 quad), Kenai Peninsula Borough, 100 ft down- stream from culvert at Sterling Highway, and 5.5 mi north of Anchor Point.	48.4	1951-52 f1978-80	4-17-01 8-25-01	166 34
600107151112800 + North Fork Deep Creek 4 miles above mouth near Ninilchik	Deep Creek	Lat 60°01'06", long 151°11'34", in SW ¹ / ₄ NW ¹ / ₄ , sec. 9, T. 2 S., R. 11 W. (Kenai A-4 quad), Kenai Peninsula Borough, 300 ft. down- stream from unnamed tributary, and 16.5 mi. east of Ninilchik.	27.7	--	4-25-01 8-30-01	32 31
600204151401800 + Deep Creek 0.6 miles above Sterling Highway near Ninilchik	Cook Inlet	Lat 60°02'01", long 151°40'30", in SE ¹ / ₄ NW ¹ / ₄ , sec. 3, T. 2 S., R. 14 W. (Kenai A-5 quad), Kenai Peninsula Borough, 1.3 mi. upstream from mouth, and 1 mi. south of Ninilchik.	217	--	4-18-01 8-21-01	285 258
600945151210900 + Ninilchik River 1.5 miles below tribu- tary 1 near Ninilchik	Cook Inlet	Lat 60°09'44", long 151°21'14", in NW ¹ / ₄ SW ¹ / ₄ , sec. 22, T. 1 N., R 12 W. (Kenai A-4 quad), Kenai Peninsula Borough, 50 ft down- stream from unnamed trib., 0.2 mi upstream from bridge, and 14 mi. northeast of Ninilchik.	29.8	--	4-23-01 8-23-01	171 17
600321151325000 + Ninilchik River below tributary 3 near Ninilchik	Cook Inlet	Lat 60°03'17", long 151°32'59", in SW ¹ / ₄ SE ¹ / ₄ , sec. 29, T. 1 S., R. 13 W. (Kenai A-5 quad), Kenai Peninsula Borough, 1000 ft. upstream from small, unnamed tributary, and 4 mi. north- east of Ninilchik.	117	--	4-18-01 8-21-01	225 113
15273040 + Rabbit Creek at Por- cupine Trail Road near Anchorage	Turnagain Arm	Lat 61°05'15", long 149°49'06" in SE ¹ / ₄ SE ¹ / ₄ NW ¹ / ₄ , sec. 33, T. 12 N., R. 3 W. (Anchorage A-8 quad), Municipality of Anchorage, 0.8 mi upstream from Potter Marsh, 0.3 mi upstream from Old Seward Highway, and 9.7 mi south of Anchorage.	13.3	1999-2000	7-05-01 7-05-01	56 58
15273097 + Little Rabbit Creek at Goldenview Drive near Anchorage	Rabbit Creek	Lat 61°04'54", long 149°46'20" in SW ¹ / ₄ SW ¹ / ₄ , sec. 35, T.12 N., R.3W. (Anchorage A-8 quad), Municipality of Anchorage, at Goldenview Drive, and 11 mi southeast of Anchorage	r5.57	1968-69 1971-72 1999-2000	7-05-01 7-05-01	16 11
15273900 + South Fork Camp- bell Creek at Canyon Mouth near Anchor- age	Turnagain Arm	Lat 61°08'52", long 149°43'12" in NE ¹ / ₄ , sec. 12, T. 12 N., R. 3 W., (Anchorage A-8 quad), Municipality of Anchorage, 0.5 mi upstream from pipeline crossing, 1.9 mi upstream from pedestrian bridge at Campbell Airstrip, and 6.8 mi southeast of Anchorage.	25.2	‡1967 - 79, c1980, ‡1981, c1989	1-18-01 2-09-01	22 18
15274796 + South Branch of South Fork Chester Creek at tank trail near Anchorage	South Fork Chester Creek	Lat 61°11'25", long 149°42'13" in SE ¹ / ₄ NW ¹ / ₄ sec. 30, T. 13 N., R. 2 W.(Anchorage A-8 quad), Municipality of Anchorage, 100 ft downstream from bridge on tank trail (Bulldog Trail), and 6.5 mi east of Anchorage.	4.30	1968, 72 1980 1998-2000	10-30-00	4.4

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2001
[Footnotes at end on table of page 386]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
SOUTH-CENTRAL ALASKA--Continued						
15283500 Moose Creek above Wishbone Hill near Sutton	Matanuska River	Lat 61°44′02″, long 149°01′35″, in NE ¹ / ₄ SE ¹ / ₄ , sec. 14, T. 19 N., R. 2 E. (Anchorage C-6 quad), Matanuska-Susitna Borough, 30 ft downstream from bridge, 40 ft upstream from unnamed tributary, 1.8 mi upstream from Buf- falo Creek, and 4.5 mi northwest of Sutton.	30.4	1999-2000	3-27-01 6-19-01	8.7 254
15283600 Premier Creek near Sutton	Moose Creek	Lat 61°42′40″ long 149°05′12″, in SE ¹ / ₄ NE ¹ / ₄ , sec. 28, T. 19 N., R. 2 E. (Anchorage C-6 quad), Matanuska-Susitna Borough, 10 ft downstream from culvert on Buffalo Mine Road (named Moose Creek Road on Anchorage C-6 quad), 4 mi north of Glenn Highway, 6 mi west of Sutton, and 7 mi northeast of Palmer.	3.38	†1996-2000	5-08-01	9.4
15285000 Wasilla Creek near Palmer	Knik Arm	Lat 61°38′37″, long 149°11′46″, in SE ¹ / ₄ SW ¹ / ₄ , sec. 13, T. 18 N., R. 1 E. (Anchorage C-6 quad), Matanuska-Susitna Borough, 20 ft downstream from culverts on Palmer-Fishhook Road, and 4.1 mi northeast of Palmer.	16.8	†1971, f†1976-83, †1984-2000	9-24-01	13
15286000 Cottonwood Creek near Wasilla	Knik Arm	Lat 61°34′30″, long 149°24′35″, in NE ¹ / ₄ SW ¹ / ₄ , sec. 11, T. 17 N., R. 1 W. (Anchorage C-7 quad), Matanuska-Susitna Borough, 30 ft upstream from Wasilla-Matanuska Trunk Road, and 0.8 mi downstream from Wasilla Lake, and 1.1 mi. southwest of Wasilla.	28.5	1947-48 ‡1949-54 1981-83 ‡1998-2000	10-06-00	20
15290200 Nancy Lake Tribu- tary near Willow	Nancy Lake	Lat 61°41′17″, long 149°57′58″, in SE ¹ / ₄ SE ¹ / ₄ , sec. 34, T. 19 N., R. 4 W. (Tyonek C-1 quad), Matanuska-Susitna Borough, 50 ft upstream from culvert at Parks Highway, 0.3 mi upstream from mouth, and 4.5 mi southeast of Willow.	8.00	f1978-79, †1980, f1981, †1983-86, †1990-2000	5-01-01 8-04-01	22 5.9
15291100 Raft Creek near Denali	Susitna River	Lat 63°03′04″, long 147°16′22″, in SE ¹ / ₄ , sec. 36, T. 21 S., R. 2 E., (Healy A-1 quad), Mata- nuska-Susitna Borough, 30 ft upstream from culvert at mi 68.9 Denali Highway, and 10.7 mi southeast of Denali.	4.33	†1963-67, †1971-75, †1977-82, †1984-90, †1993-2000	07-11-01	18
15297200 Myrtle Creek near Kodiak	Kalsin Bay	Lat 57°36′12″, long 152°24′12″ in NW ¹ / ₄ SW ¹ / ₄ , sec. 6, T. 30 S., R. 19 W. (Kodiak C-2 quad), Kodiak Island Borough, 0.1 mi upstream from bridge, 0.3 mi upstream from mouth, and 13 mi south of Kodiak.	4.74	‡1963-86, †1987-89, †1991-2000	12-28-00	120
SOUTHWEST ALASKA						
15297609 Stapp Creek near Cold Bay	Cold Bay	Lat 55°11′17″, long 162°42′47″, in SE ¹ / ₄ SE ¹ / ₄ NW ¹ / ₄ , sec. 1, T. 58 S., R. 89 W. (Cold Bay A-3 quad), Aleutians East Borough, 0.9 mi upstream from mouth, and 1 mi south of Cold Bay.	1.68	--	10-16-00 2-15-01 4-24-01 6-11-01 8-27-01	2.2 5.1 2.9 0.8 0.8

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2001
[Footnotes at end on table of page 386]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
SOUTHWEST ALASKA--Continued						
15297810 Frosty Creek near Cold Bay	Izembek Lagoon	Lat 55°09'59", long 162°48'22", in SE ¹ / ₄ SW ¹ / ₄ SE ¹ / ₄ , sec. 8, T.58 S., R. 89 W. (Cold Bay A-3 quad), Aleutians East Borough, 2.8 mi upstream from mouth, and 4.5 mi southwest of Cold Bay.	5.92	--	10-17-00 2-15-01 4-24-01 6-11-01 8-27-01	37 28 32 42 44
15297970 Tlikakila River at Mouth near Port Alsworth	Lake Clark	Lat 60°23'34", long 153°48'44", in NW ¹ / ₄ NW ¹ / ₄ SW ¹ / ₄ , sec. 33, T. 4 N., R. 26 W. (Lake Clark B-3 quad), about 22 mi northeast of Port Alsworth.	622	1999-2000	5-11-01	449
15297980 Currant Creek at Mouth near Port Alsworth	Lake Clark	Lat 60°18'2", long 154°00'03", in SW ¹ / ₄ NE ¹ / ₄ , sec. 32, T. 3 N., R. 27 W. (Lake Clark B- 3 quad), about 14 mi northeast of Port Alsworth.	165	1999-2000	6-05-01 7-10-01 8-21-01 9-25-01	1,440 1,470 1,620 671
15297990 Kijik River at Mouth near Port Alsworth	Lake Clark	Lat 60°17'06", long 154°13'26", in NE ¹ / ₄ NE ¹ / ₄ , sec. 12, T. 2 N., R. 29 W. (Lake Clark B-4 quad), about 8 mi northeast of Port Alsworth.	298	1999-2000	8-20-01 9-25-01	817 447
15298010 Tanalian River at Mouth at Port Alsworth	Lake Clark	Lat 60°11'55", long 154°20'27", in NW ¹ / ₄ NW ¹ / ₄ NE ¹ / ₄ , sec. 8, T. 1 N., R. 29 W. (Lake Clark A-4 quad), about 0.5 mi southeast of air- port runway at Port Alsworth.	205	1999-2000	5-11-01 6-05-01 8-20-01 9-24-01	129 1,560 2,090 450
15298050 Chulitna River near Port Alsworth	Lake Clark	Lat 60°10'58", long 154°34'33", in NE ¹ / ₄ NW ¹ / ₄ NE ¹ / ₄ , sec. 13, T. 1 N., R. 31 W. (Lake Clark A-5 quad), about 9 mi southwest of Port Alsworth.	1,157	1999-2000	6-04-01 7-09-01 8-20-01 9-25-01	7,420 2,230 2,370 1,870
15299000 Lake Clark Outlet near Port Alsworth	Newhalen River	Lat 60°01'10", long 154°45'11", in SW ¹ / ₄ NE ¹ / ₄ , sec. 10, T. 2 S., R. 32 W. (Lake Clark A-5 quad), about 20 mi southwest of Port Alsworth.	2,942	1999-2000	6-04-01 7-09-01 8-20-01 9-25-01	8,530 23,800 21,600 10,600
15300350 Chinkelyes Creek tributary near Pedro Bay	Chinkelyes Creek	Lat 59°44'02", long 153°48'40", in SE ¹ / ₄ NE ¹ / ₄ NE ¹ / ₄ , sec. 23, T. 5 S., R. 27 W. (Iliamna C-3 quad), Lake and Peninsula Borough, 60 ft upstream from culvert, 8 mi east of Pile Bay and 11 mi east of Pedro Bay.	0.40	†1998-2000	6-27-01	10
15300700 +Alagnak River below Nonvianuk River near Igiugig	Kvichak River	Lat 59°01'16", long 155°50'51", in NE ¹ / ₄ SE ¹ / ₄ , sec. 30, T. 13 S., R. 39 W. (Iliamna A-8 quad), Lake and Peninsula Borough, 600 ft down- stream from mouth of Nonvianuk River, 4.6 mi upstream from Sugarloaf Mountain Creek, and 21.5 mi south of Igiugig	922	1999-2000	2-27-01 6-06-01	1,420 4,420
15300730 +Alagnak River 27 miles above mouth near McCormick near Levelock	Kvichak River	Lat 59°06'52", long 156°23'01", in NW ¹ / ₄ NE ¹ / ₄ , sec. 29, T. 12 S., R. 42 W. (Dillingham A-2 quad), Lake and Peninsula Borough, 560 ft downstream from McCormick's cabin, 27 mi above mouth, and 16.5 mi east of Levelock.	1148	1999-2000	2-27-01 6-04-01	1,420 3,830
15300770 +Alagnak River 13 miles above mouth near lower barge near Levelock	Kvichak River	Lat 59°03'05", long 156°37'25", in SW ¹ / ₄ NE ¹ / ₄ , sec. 16, T.13 S., R.44 W. (Dillingham A-2 quad), Lake and Peninsula Borough, 1300 upstream from lower barge, 13 mi above mouth, and 9.5 mi southeast of Levelock.	1282	1999-2000	6-05-01	3,990

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2001
[Footnotes at end on table of page 386]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
SOUTHWEST ALASKA--Continued						
15302900 Moody Creek at Aleknagik	Wood River	Lat 59°16′34″, long 158°35′42″, in SE ¹ / ₄ , sec. 30, T. 10 S., R. 55 W. (Dillingham B-7 quad), 500 ft upstream from mouth at Wood River at the Aleknagik Mission.	1.28	1968 †1969-73, †1975-83, †1988-89 †1993-2000	5-14-01 8-16-01	6.2 1.0
15303660 Gold Creek at Takotna	Takotna River	Lat 62°59′20″, long 156°04′08″, in SE ¹ / ₄ SE ¹ / ₄ , sec. 34, T. 34 N., R. 36 W. (Iditarod D-1 quad), at Takotna, 350 ft upstream from bridge, and 400 ft upstream from mouth.	6.31	†1987-2000	5-22-01	42
YUKON ALASKA						
15305900 Dennison Fork near Tetlin Junction	South Fork Forty Mile River	Lat 63°25′24″, long 142°29′00″, in SW ¹ / ₄ sec. 14, T. 19 N., R. 15 E. (Tanacross B-3 quad), 10 ft downstream from culvert at mi 10.7 Taylor Highway and 8.3 mi northeast of Tetlin Junction.	2.93	†1964-70, †1972-75, †1977, †1979, †1981-84, †1983-90, †1992-2000	7-25-01 9-02-01	15 10
15344000 King Creek near Dome Creek	O'Brien Creek	Lat 64°23′38″, long 141°24′43″, in NE ¹ / ₄ SW ¹ / ₄ sec. 16, T. 6 S., R. 32 E. (Eagle B-1 quad), at mi 120 Taylor Highway, 1,100 ft upstream from culvert at mi 119.9, 0.4 mi upstream from mouth, 4.9 mi east of Dome Creek, and 28 mi south of Eagle.	5.87	†1975-77 †1979-80 †1982 †1983-1990 †1991-2000	5-22-01 7-25-01	43 42
15388030 Nation River near Nation	Yukon River	Lat 65°14′ 23″, long 141°39′ 10″ in NW ¹ / ₄ NW ¹ / ₄ , sec. 30, T. 5N.,R. 30E., (Charley River A-2 quad), in Yukon-Charley Preserve, 3.75 mi upstream from mouth, 4.25 mi downstream from mouth of Hard Luck Creek, 5 mi northeast of Nation townsite, and 33 mi northwest of Eagle.	931	‡1991-2000	12-16-00 3-09-01	198 122
15388060 Kandik River near Nation	Yukon River	Lat 65°23′44″,long 142°25′41″ in NW ¹ / ₄ NE ¹ / ₄ , sec. 32, T. 6N., R. 25E., (Charley River B-3 quad), in Yukon-Charley Rivers National Preserve, on right bank, 0.75 mi upstream of the mouth of Threemile Creek, 3.75 mi above the mouth of the Kandik River, 23 mi northwest of Nation townsite and 55 mi north-northwest of Eagle.	1084	‡1994-2000	12-15-00 3-09-01 8-30-01	85 43 941
15389000 Porcupine River near Fort Yukon	Yukon River	Lat 66°59′26″,long 143°08′16″ in NE ¹ / ₄ SW ¹ / ₄ , sec. 16, T. 25N., R. 21E., (Black River D-5 quad), 1,000 ft upstream from John Herberts Village, and 65 mi northeast of Fort Yukon.	a29,500	‡1964-79	3-29-01 6-30-01 7-16-01 8-07-01 8-27-01 9-17-01	1,090 20,500 24,200 16,700 18,800 18,900
15439800 Boulder Creek near Central	Crooked Creek	Lat 65°34′05″, long 144°53′13″, in NW ¹ / ₄ , sec. 32, T. 9 N., R. 14 E. (Circle C-2 quad), 2000 ft upstream from bridge at mi 125.4 Steese Highway, 0.7 mi upstream from mouth, and 2.3 mi west of Central.	31.3	†1964-65, ‡1966-82, †1983, ‡1984-86, †1988-2000	5-23-01 7-18-01	206 37

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2001
[Footnotes at end on table of page 386]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
YUKON ALASKA--Continued						
15442500 Quartz Creek near Central	Crooked Creek	Lat 65°37'09", long 144°28'55", in SW ¹ / ₄ , sec. 7, T. 9 N., R. 16 E. (Circle C-2 quad), at mi 138.1 on Steese Highway, 1 mi upstream from mouth, and 10 mi east of Central.	17.2	†1990, †1992-2000	5-23-01 7-18-01	76 73
15453610 Ray River Tributary near Stevens Village	Ray River	Lat 65°56'57", long 149°54'50" in SE ¹ / ₄ , sec.17, T.13 N., R. 11 W. (Livengood D-6 quad), at mi 63.8 on the Dalton Highway and 22 mi west of Stevens Village.	8.00	†1977, †1979-80 †1982 †1987-88 †1990-2000	5-23-01 8-22-01	85 8.2
15470300 Little Jack Creek near Nabesna	Jack Lake	Lat 62°32'39", long 143°19'22", in SW ¹ / ₄ NW ¹ / ₄ SE ¹ / ₄ , sec. 22 T. 9 N., R. 11 E. (Nabesna C-5 quad), mi 25.8 Nabesna Road, and 15.6 mi northwest of Nabesna.	6.73	†1975-77 †1980 †1982-83 †1985-88 †1990-95 †1997-2000	6-20-01 8-01-01	6.6 24
15472000 Tanana River near Tok Junction	Yukon River	Lat 63°19'00", long 142°38'30" in NW ¹ / ₄ , sec. 25, T. 18 N., R. 14 E. (Tanacross B-4 quad) 1.4 mi west of junction of Alaska and Taylor High- ways, at bridge crossing.	6,800	‡1950-1953	8-23-01	24600
15476300 Berry Creek near Dot Lake	Tanana River	Lat 63°41'23", long 144°21'47", in NW ¹ / ₄ , sec. 13 T. 22 N., R. 5 E. (Mt. Hayes C-1 quad), 100 ft upstream from former bridge site at mi 1371.4 on abandoned section of Alaska High- way, 1.9 mi upstream from mouth, and 6.0 mi west of Dot Lake.	65.1	†1963-71, †1972-81, †1982,1984, †1988 †1990-94 †1997-2000	5-24-01 7-24-01	141 268
15478093 Suzy Q Creek near Pump Station 10	Delta River	Lat 63°29'43", long 145°51'27", in SW ¹ / ₄ , sec. 29, T. 16 S., R. 10 E. (Mt. Hayes B-4 quad), at mi 224.8 on Richardson Highway, 0.1 mi upstream from mouth, and 6 mi north of Pump Station 10.	1.29	†1987, †1991-94, †1997-2000	6-12-01 7-24-01	12 7.7
15480000 Banner Creek at Richardson	Tanana River	Lat 64°17'24" long 146°20'56", in SW ¹ / ₄ , sec. 22, T. 7 S., R. 7 E. (Big Delta B-5 quad), 400 ft upstream from bridge at mi 295.4 Richardson Highway 0.2 mi upstream from mouth, and 0.4 mi northwest of Richardson.	20.2	†1964-67, †1969-70, †1972, †1974-75, †1977, †1982-84, †1989-93, †1995-96 †1998-2000	7-31-01	26
15493400 Chena River below Hunts Creek near Two Rivers	Tanana River	Lat 64°51'36", long 146°48'12", in NW ¹ / ₄ , sec. 5, T. 1 S., R. 5 E. (Big Delta D-6 quad), approx- imately 0.6 mi downstream from Hunts Creek and 1.5 mi south of mi 25.8 Chena Hot Springs Road.	1,344	1985, 1987-89, 1991-2000	9-27-01	798

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2001
[Footnotes at end on table of page 386]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
YUKON ALASKA--Continued						
15493700 Chena River below Moose Creek Dam	Tanana River	Lat 64°48'03", long 147°13'40", in NW ¹ / ₄ , sec. 30, T. 1 S., R. 3 E. (Fairbanks C-1 quad), 3.1 mi downstream from Moose Creek Dam, 1.4 mi upstream from Potlatch Creek, 5 mi northeast of North Pole, and 14.7 mi east of Fairbanks	1,460	‡1979-96, 1997-99	9-26-01	893
1551400425 Noyes Slough at Minnie Street Bridge	Chena River	Lat 64°50'54", long 147°42'26", in NW ¹ / ₄ sec. 11, T.1 S., R.1 W., Fairbanks North Star Borough, (Fairbanks D-2 Quad), Hydrologic Unit 19040506, 900 ft. downstream from Noyes Slough entrance 0.3 mi downstream from Wendell StreetBridge, 5.6 mi upstream from mouth, and 11.3 mi downstream from Chena Slough entrance.	--	1967,1971, 1989,1990, 1992-1994 2000	7-31-01	36
					8-17-01	0
					8-20-01	14
15516200 Slime Creek near Cantwell	Nenana River	Lat 63°30'34", long 148°48'39", in SE ¹ / ₄ , sec. 24, T. 16 S., R. 7 W. (Healy C-4 quad), at mi 219.9 George Parks Highway, 9.1 mi northeast of Cantwell	6.90	†1990-2000	7-11-01	27
15517980 Dragonfly Creek near Healy	Nenana River	Lat 63°47'45", long 148°55'19", in SW ¹ / ₄ , sec. 9, T.13 S., R. 7 W., (Healy D-4 quad), at mi 242.6 George Parks Highway, 6 mi southeast of Healy.	0.71	†1990-95, 1997-2000	7-27-01	2.0
15541600 Globe Creek near Livengood	Tatilina River	Lat 65°17'08", long 148°07'56", in SE ¹ / ₄ , sec. 3, T. 5 N., R. 3 W. (Livengood B-3 quad), 0.2 mi upstream from culvert at mi 36.7 on Elliott Highway.	23.0	†1964-70, †1972-74, †1976, †1982-83, †1985-86, †1989-91, †1993, †1995-2000	5-23-01	95
15564868 Snowden Creek near Wiseman	Dietrich River	Lat 67°44'20", long 149°44'24", in SW ¹ / ₄ , sec. 26, T. 34 N., R. 10 W. (Chandalar C-6 quad), upstream from culvert at mi 213.5 of the Dalton Highway and 24.5 mi northeast of Wiseman.	16.7	†1977-80, †1982, †1984-85, †1987-94, †1996-2000	6-07-01	202
					6-21-01	30
					8-23-01	19
15564872 Nugget Creek near Wiseman	Middle Fork Koyukuk River	Lat 67°29'25", long 149°52'20", in NW ¹ / ₄ , sec. 30, T. 31 N., R. 10 W. (Chandalar B-6 quad), upstream from culvert at mi 195.6 Dalton Highway, and 8.7 mi northeast of Wiseman.	9.47	†1975-79, †1982, †1985, †1987, †1989-2000	5-24-01	12
					6-7-01	64
					6-21-01	16
					8-23-01	3.7
15564884 Prospect Creek near Prospect Camp	Jim River	Lat 66°46'56", long 150°41'06", in NW ¹ / ₄ , sec. 31, T. 23 N., R. 14 W. (Bettles D-2 quad), at mi 135.2 Dalton Highway, 0.4 mi downstream from Trans-Alaska Pipeline crossing, 1.5 mi upstream from mouth .	110	†1975-78, †1980 †1982 †1989 †1992-2000	5-24-01	466
15564887 Bonanza Creek Tributary near Prospect Camp	Bonanza Creek	Lat 66°36'52", long 150°41'24", in SE ¹ / ₄ , sec. 25, T. 21 N., R. 15 W., 0.3 mi downstream from culverts at mi 121.2 on the Dalton Highway, 3.4 mi upstream from mouth, and 13.5 mi south of pump station 5.	11.7	†1975-76, †1982, †1985-86, †1989-95, †1997-2000	5-24-01	64

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2001
[Footnotes at end on table of page 386]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
YUKON ALASKA--Continued						
15564950 Indian River at Utopia	Koyukuk River	Lat 65°59'49", long 153°41'31", in NW ¹ / ₄ , sec. 19, T. 7 N., R. 25 E. (Meloizitna D-2 quad), at mi 0.2 on road to Indian Mountain, and 1.8 mi upstream from mouth of Flat Creek.	38.8	†1998-2000	6-1-01 6-14-01 9-7-01	232 124 107
15564960 Utopia Creek at Utopia	Indian River	Lat 65°59'19", long 153°42'18", in SE ¹ / ₄ , sec. 24, T. 7 N., R. 24 E. (Meloizitna D-2 quad), 0.3 mi south of landing strip at Utopia, and 1.2 mi upstream from mouth.	5.18	†1998-2000	6-01-01 6-14-01 9-7-01	25 18 14
15565400 Anvik River near Anvik	Yukon River	Lat 62°47'22", long 160°41'49", in NW ¹ / ₄ SE ¹ / ₄ , sec. 10, T. 31 N., R. 61 W. (Holy Cross D-4 quad), approx. 25 river mi upstream from mouth and 18 mi northwest of Anvik.	--	--	8-03-01	2,190
15565449 Municipal Reserve Creek at Pilot Sta- tion.	Yukon River	Lat 61°56'19", long 162°52'53", in NW ¹ / ₄ SE ¹ / ₄ , sec. 5, T. 21 N., R. 74 W. (Marshall D-3 quad), 0.3 mile upstream from mouth, and 0.1 mile north of Village of Pilot Station.	1.43	†1993-97	6-27-01 9-22-01	.95 .91
NORTHWEST ALASKA						
15565730 Chiroskey River near Unalakleet	Unalakleet River	Lat 63°55'06", long 160°18'58", in NW ¹ / ₄ , sec. 19, T. 18 S., R. 8 W. (Unalakleet D-3 quad), 0.75 mi upstream from mouth, 14 mi northeast of Unalakleet.	296	†1998	6-14-01	934
15583500 Etta Creek near Council	East Fork Solomon River	Lat 64°41'56", long 164°09'57", in NE ¹ / ₄ NE ¹ / ₄ , sec. 24, T. 9 S., R. 28 W. (Solomon C-5 quad), 100 ft upstream from Nome-Council Road, 0.2 mi upstream from mouth, and 25 mi southwest of Council.	1.33	--	7-17-01	5.9
15585000 Goldengate Creek near Nome	Norton Sound	Lat 64°26'51", long 165°03'14", in SW ¹ / ₄ , sec. 15, T. 12 S., R. 32 W. (Nome B-1 quad), 500 ft upstream from culvert on Nome-Council Road and 11 mi southeast of Nome.	1.55	†1965 1966 †1986-88 †1990-2000	7-18-01	.78
15624998 Arctic Creek above tributary near Nome	Cripple River	Lat 64°38'16", long 165°42'42", in NE ¹ / ₄ , sec. 8, T. 10 S., R. 35 W. (Nome C-2 quad), 300 ft upstream from Nome-Teller Road crossing, about 125 ft upstream from tributary entering left bank, 2 mi upstream from mouth, and 13 mi northwest of Nome.	1.13	† 1975, †1979-84, †1986-2000	7-16-01	4.0
15633000 Washington Creek near Nome	Sinuk River	Lat 64°42'52", long 165°49'13", in NW ¹ / ₄ , sec. 14, T. 9 S., R. 35 W. (Nome C-2 quad), 400 ft upstream from culvert on Nome-Teller Road, and 19 mi northwest of Nome.	6.34	†1964-66, †1968-78, †1980-2000	7-02-01	.76
15635000 Eldorado Creek near Teller	Tisuk River	Lat 64°57'38", long 166°11'59", in NE ¹ / ₄ NE ¹ / ₄ , sec. 20, T. 6 S., R. 37 W. (Nome D-3 quad), 30 ft downstream from bridge at mi 46.3 of Nome-Teller Road, 0.5 mi upstream from mouth at Tisuk River and 21 mi south of Teller.	5.83	1986-87 ‡1988-90 1991 ‡1992-2000	10-04-00 7-02-01	9.8 26

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2001
[Footnotes at end on table of page 386]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
NORTHWEST ALASKA--Continued						
15746890 Competition Creek near Kivalina	Wulik River	Lat 68°08'05", long 163°03'37", in NW ¹ / ₄ , sec. 32, T. 32 N., R. 19 W. (DeLong Mts A-2 quad), 600 ft upstream from mouth, 7 mi northwest of Red Dog Mine mill site, 39 mi north of Noatak, and 48 mi northeast of Kivalina.	6.85	--	7-8-00 10-6-00 7-10-01	4.8 3.4 4.9
15746980 Ikalukrok Creek above Red Dog Creek near Kivalina	Wulik River	Lat 68°05'38", long 162°56'47", in SE ¹ / ₄ , sec. 11, T. 31 N., R. 19 W. (DeLong Mts A-2 quad), 300 ft upstream from Red Dog Creek, 3 mi northwest of Red Dog Mine mill site, 36 mi north of Noatak, and 50 mi northeast of Kivalina. Cominco Station 9.	59.2	‡1991-92, 1993-2000	10-5-00 6-8-01 7-10-01 9-11-01 9-14-01	39 523 94 328 191
15746983 Red Dog Mine Clean Water Ditch near Kivalina	Ikalukrok Creek	Lat 68°04'28", long 162°51'35", in NE ¹ / ₄ , sec. 19, T. 31 N., R. 18 W. (DeLong Mts A-2 quad), 500 ft downstream from outfall of clean water ditch, 300 ft northwest of Red Dog Mine mill site, 0.4 mi upstream from South Fork Red Dog Creek, 36 mi north of Noatak, and 50 mi northeast of Kivalina. Cominco station 140.	4.74 (total) 4.3 (contributing)	‡1991-92, 1993-2000	10-6-00 5-14-01 5-15-01 5-16-01 6-8-01 7-11-01 9-11-01	1.9 1.8 2.9 3.0 47 4.6 19
1574698750 Red Dog Creek above North Fork Red Dog Creek near Kivalina	Ikalukrok Creek	Lat 68°04'58", long 162°52'54", in SW ¹ / ₄ , sec. 19, T. 31 N., R. 18 W. (DeLong Mts A-2 quad), 500 ft upstream from North Fork Red Dog Creek, 36 mi north of Noatak, and 50 mi northeast of Kivalina. Cominco station 20.	9.3 (total) 5.5 (contributing)	1991-93	5-16-01	24
15746988 North Fork Red Dog Creek near Kivalina	Ikalukrok Creek	Lat 68°05'03", long 162°52'52", in SW ¹ / ₄ , sec. 18, T. 31 N., R. 18 W. (DeLong Mts. A-2 quad), 500 ft upstream from mouth, 1.1 mi northwest of Red Dog Mine mill site, 36 mi north of Noatak, and 50 mi northeast of Kivalina. Cominco station 12.	15.9	‡1991-94, ‡1995-2000	10-6-00 6-4-01 6-5-01 6-6-01 6-8-01 7-11-01 9-10-01	12 336 287 326 215 12 54
15746990 Red Dog Creek above Mouth near Kivalina	Ikalukrok Creek	Lat 68°05'20", long 162°55'30", in NW ¹ / ₄ , sec. 13, T. 31 N., R. 19 W. (DeLong Mts. A-2 quad), 0.6 mi upstream from mouth, 2.3 mi northwest of Red Dog Mine mill site, 36 mi north of Noatak, and 50 mi northeast of Kivalina. Cominco Station 10.	24.6 (total) 20.8 (contributing)	‡1991-92, 1993-2000	10-5-00 10-8-00 7-10-01 7-11-01 9-14-01	28 8.3 31 16 73
1574699020 Ikalukrok Creek 0.6 mi below Red Dog Creek near Kivalina	Wulik River	Lat 68°05'09", long 162°58'07", in NE ¹ / ₄ , sec. 15, T. 31 N., R. 19 W. (DeLong Mts. A-2 quad), Northwest Arctic Borough, 0.6 mi downstream from Red Dog Creek, 3 mi west-northwest of Red Dog Mine, 36 mi north of Noatak, and 48 mi northeast of Kivalina. Cominco Station 150.	n	--	6-5-01 6-8-01 7-9-01 9-12-01	910 800 120 345
15746994 Ikalukrok Creek below Dudd Creek near Kivalina	Wulik River	Lat 68°00'17", long 163°02'26", in NW ¹ / ₄ , sec. 16, T. 30 N., R. 19 W. (DeLong Mts. A-2 quad), Northwest Arctic Borough, 200 ft downstream from Dudd Creek, 30 mi north of Noatak, and 43 mi northeast of Kivalina. Cominco Station 7.	121	‡1991-92 1999-2000	10-6-00 6-4-01 6-9-01 7-10-01 9-14-01	62 1320 933 165 387

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2001
[Footnotes at end on table of page 386]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
NORTHWEST ALASKA--Continued						
15746998	Wulik River	Lat 67°52'28", long 163°40'14", in NE ¹ / ₄ , sec. 34, T. 29 N., R. 22 W. (Noatak D-4 quad), 1,000 ft upstream from mouth, 25 mi northeast of Kivalina, and 28 mi northwest of Noatak.	119	1991, †1992-2000	6-7-01 7-11-01 9-13-01	1180 32 165
ARCTIC SLOPE ALASKA						
15904800	Sagavanirktok River	Lat 68°12'54", long 149°24'13", in SW ¹ / ₄ , sec. 20, T. 14 S., R. 12 E. (Phillip Smith Mts. B-4 quad), at mi 253.1 on Dalton Highway, and 15 mi south of Pump Station 4.	48.7	‡1991-95 1999-2000	11-7-00 4-17-01 6-7-01 6-12-01 6-21-01 8-1-01 9-5-01	2.4 0 365 183 238 92 34
15904900	Atigun River	Lat 68°22'25", long 149°18'48", in SE ¹ / ₄ , sec. 28, T. 12 S., R. 12 E. (Phillip Smith Mts. B-4 quad), 0.2 mi upstream from culvert at mi 265 on Dalton Highway, 0.9 mi upstream from mouth, and 4 mi south of Pump Station 4.	32.6	‡1977-86, †1987-91, †1994, †1996-99	6-8-01 6-20-01	211 91
15910300	Sagavanirktok River	Lat 69°09'38", long 148°49'40", in NE ¹ / ₄ , sec. 30, T. 3 S., R. 14 E. (Sagavanirktok A-4 quad), 500 ft upstream from culvert at mi 335.2 on Dalton Highway, 0.8 mi upstream from mouth, and 16 mi south of Sagwon.	12.7	†1997-2000	6-10-01 6-12-01	101 48
15918200	Sagavanirktok River	Lat 69°57'14", long 148°43'48", in NE ¹ / ₄ , sec. 19, T. 1 N., R. 14 E. (Sagavanirktok D-3 quad), at mi 386.2 on Dalton Highway, 0.4 mi upstream from mouth, and 23 mi south of Deadhorse.	a 12	†1988-91, †1995-97 †1999-2000	6-10-01 6-20-01	14 1.6

FOOTNOTES

- † Operated as a crest-stage partial-record station
‡ Operated as a continuous-record station
+ See analysis of samples collected at miscellaneous water-quality sites
* Operated as a stage-only partial-record station
a Approximately
b Ponded water but no flow
d Channel dry
e Estimated

- f Low-flow partial-record station
g Not previously published
h Previously published as 15052482 Jordan Creek at Trout Street Bridge near Auke Bay
j Ice effect
n To be determined
p Peak flow
r Revised

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

SOUTHEAST ALASKA

15049900 GOLD CREEK NEAR JUNEAU

DATE	TIME	MEDIUM CODE	SAMPLE TYPE	STREAM WIDTH (FT) (000004)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (000061)	SAM- PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (NTU) (00076)
NOV 15...	1000	9	9	35.3	27	20	3044	130	7.6	8.0	3.0	--	.2
JAN 02...	0950	9	9	33.6	34	10	3044	--	--	--	4.0	5	.2
FEB 08...	1100	9	9	30.2	39	20	3044	139	7.8	1.0	1.5	<1	.3
MAR 08...	0930	9	9	11.8	21	20	3044	162	7.6	4.0	3.0	<1	.3
MAY 31...	0915	9	9	50.0	184	10	3044	85	7.4	--	4.0	<1	--
JUL 18...	1030	9	9	46.4	144	20	3044	77	7.1	17.0	6.0	<1	--
AUG 13...	1450	9	9	39.2	112	20	3044	69	7.3	36.5	11.0	<1	--
15...	1045	9	9	42.5	125	20	3044	70	7.3	12.0	6.5	<1	--
SEP 10...	1245	9	9	32.5	91	10	3044	109	7.1	15.0	9.0	<1	--
25...	0900	9	9	45.0	146	10	3044	81	7.6	--	10.5	<1	--

DATE	TURBID- ITY LAB HACH 2100AN (NTU) (99872)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ANC WATER UNFLTRD FET MG/L AS CACO3 (00410)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)
NOV 15...	--	--	--	--	--	32	38	31	--	--	--	--	--
JAN 02...	--	65	17.8	4.97	1.0	--	--	--	32.4	.8	<.2	.01	2.5
FEB 08...	--	70	19.3	5.27	.9	34	42	34	33.3	.9	<.2	<.01	2.8
MAR 08...	5.9	76	20.6	5.88	1.1	35	43	35	38.3	.9	<.2	<.01	2.5
MAY 31...	1.8	40	11.8	2.52	.7	23	26	21	16.3	1.2	.1	<.01	2.0
JUL 18...	.4	37	10.7	2.51	.7	22	26	21	16.8	.5	<.01	<.01	1.7
AUG 13...	20	32	9.33	2.03	.6	20	22	18	14.4	.3	.1	<.01	1.7
15...	1.1	31	9.16	2.03	.6	19	22	18	14.7	.4	.1	<.01	1.6
SEP 10...	1.1	34	8.11	3.34	1.4	29	33	27	21.4	.6	<.2	<.01	9.8
25...	1.0	37	10.7	2.35	.6	22	25	20	--	--	--	--	1.9

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
NOV 15...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 02...	90	--	--	--	--	<2.0	32.9	<1.00	<8.00	<.8	<13.0	<4.7	<10
FEB 08...	95	--	--	--	--	<2.0	35.4	<1.00	<8.00	<.8	<13.0	<4.7	<10
MAR 08...	101	<.006	.501	--	<.018	<2.0	33.7	<1.00	<8.00	<.8	<13.0	<4.7	<10
MAY 31...	52	<.006	.271	--	<.020	<2.0	26.6	<1.00	<8.00	<.8	<13.0	<5.0	<10
JUL 18...	48	E.005	.090	--	<.020	<2.0	22.1	<1.00	<8.00	<.8	<13.0	<5.0	<10
AUG 13...	31	<.006	.080	E.022	--	<2.0	22.4	<1.00	<8.00	<.8	<13.0	<5.0	<10
15...	39	<.006	.066	--	<.020	<2.0	21.9	<1.00	<8.00	<.8	<13.0	<5.0	<10
SEP 10...	62	<.006	E.156	<.040	--	<2.0	--	<1.00	<8.00	<.8	<13.0	<5.0	70
25...	50	.029	.498	--	<.020	<2.0	24.9	<.50	<8.00	<.8	<13.0	<6.0	<10

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

SOUTHEAST ALASKA

15049900 GOLD CREEK NEAR JUNEAU--Continued

DATE	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
NOV 15...	--	--	--	--	--	--	--	--	--	--	--
JAN 02...	E.08	<3.9	<3.2	<.23	<45.0	<53.0	E1.6	<4.6	94.6	<8.0	E10
FEB 08...	E.06	<3.9	<3.2	<.23	<45.0	<53.0	E1.3	<4.6	103	<8.0	<20
MAR 08...	<.08	<3.9	<3.2	<.23	<45.0	<53.0	<2.4	<4.6	105	<8.0	<20
MAY 31...	.31	<4.0	<3.0	--	<50.0	<50.0	<2.0	<5.0	58.6	<8.0	<20
JUL 18...	<.08	<4.0	<3.0	<.01	<50.0	<50.0	<2.0	<5.0	55.8	<8.0	<20
AUG 13...	<.08	<4.0	<3.0	<.01	<50.0	<50.0	<2.0	<5.0	46.5	<8.0	<20
15...	E.04	<4.0	<3.0	<.01	<50.0	<50.0	<2.0	<5.0	46.7	<8.0	<20
SEP 10...	<.08	<4.0	13.6	<.01	<50.0	<50.0	<2.0	<5.0	29.4	<8.0	<20
25...	.13	<4.0	<2.0	<.01	<50.0	<30.0	E1.0	<9.0	53.9	<8.0	<24

15052900 MENDENHALL RIVER AT BROTHERHOOD BRIDGE AT AUKE BAY

[illegible]

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

SOUTHEAST ALASKA

15109029 UPPER PETERSON CREEK NEAR AUKE BAY

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	STREAM WIDTH (FT) (00004)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED CENT SATUR- ATION (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
JUL 12...	1220	2.1	8.20	760	12.2	117	6.5	52	13.5

15109031 PETERSON CREEK TRIBUTARY NUMBER 8 NEAR AUKE BAY

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	STREAM WIDTH (FT) (00004)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED CENT SATUR- ATION (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
JUL 12...	1240	.20	3.60	760	10.8	94	7.3	45	9.0

15109033 PETERSON CREEK TRIBUTARY NUMBER 7 NEAR AUKE BAY

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	STREAM WIDTH (FT) (00004)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED CENT SATUR- ATION (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
JUL 12...	1300	.10	1.20	760	11.5	96	7.1	46	7.5

15109035 PETERSON CREEK TRIBUTARY NUMBER 6 NEAR AUKE BAY

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	STREAM WIDTH (FT) (00004)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED CENT SATUR- ATION (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
JUL 12...	1340	1.1	4.80	760	12.4	101	7.2	39	6.5

15109039 PETERSON CREEK TRIBUTARY NUMBER 4 NEAR AUKE BAY

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	STREAM WIDTH (FT) (00004)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED CENT SATUR- ATION (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
JUL 12...	1440	.90	3.20	760	11.3	97	7.2	53	8.5

15109041 PETERSON CREEK TRIBUTARY NUMBER 3 NEAR AUKE BAY

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	STREAM WIDTH (FT) (00004)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED CENT SATUR- ATION (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
JUL 12...	1520	.80	4.60	760	11.8	98	7.3	57	7.5

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

SOUTH-CENTRAL ALASKA

601105149382400 EXIT GLACIER CREEK CHANNEL AT MI .1 HARDING TRAIL NEAR SEWARD

DATE	TIME	MEDIUM CODE	SAMPLE TYPE	STREAM WIDTH (FT) (000004)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (000061)	SAM- PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (000095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (000020)	TEMPER- ATURE WATER (DEG C) (000010)	BARO- METRIC PRES- SURE (MM OF HG) (000025)	OXYGEN, DIS- SOLVED (MG/L) (00300)
JUL 27...	1330	9	9	--	21	--	--	43	7.2	--	3.5	--	13.5
AUG 06...	1720	9	9	16.6	25	10	8010	24	7.5	20.5	2.0	752	12.5
20...	1100	9	9	13.5	11	70	8010	52	7.8	--	3.0	737	13.2
SEP 11...	1430	9	9	5.00	1.1	70	8010	83	7.6	10.5	4.0	746	12.2
25...	1400	9	9	9.00	3.8	70	8010	87	7.9	--	4.0	736	--

DATE	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL 27...	--	<1	<1	<1
AUG 06...	92	<1	<1	E2
20...	101	E3	<1	--
SEP 11...	95	<1	<1	E1
25...	--	E1	<1	--

601105149385100 EXIT GLACIER CREEK TRIBUTARY AT MILE .6 HARDING TRAIL NEAR SEWARD

DATE	TIME	MEDIUM CODE	SAMPLE TYPE	STREAM WIDTH (FT) (00004)	DIS- CHARGE, INST. CUBIC	SAM- PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)
					FEET PER SECOND (00061)				WATER FIELD (STAND- ARD UNITS) (00400)				
JUL 27...	1135	9	9	--	8.4	10	3045	89	7.9	--	7.1	748	12.1
AUG 06...	1650	9	9	15.0	5.7	10	8010	85	7.7	14.5	7.5	752	10.3
20...	1350	9	9	14.0	7.0	70	8010	91	8.1	12.0	6.5	--	12.1
SEP 11...	1400	9	9	14.5	3.0	70	8010	113	7.9	10.5	6.0	--	12.8
25...	1320	9	9	13.0	4.2	70	8010	109	7.8	--	5.5	725	9.4

[illegible]

SOUTH-CENTRAL ALASKA

[illegible]

DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
JUL 27...	<.007	<10	<3.0	E.21
AUG 06...	--	--	--	--
20...	--	--	--	--
SEP 11...	--	--	--	--
25...	--	--	--	--

[illegible]

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

SOUTH-CENTRAL ALASKA

601143149353400 EXIT GLACIER CREEK DISTRIBUTARY AT MILE 8.5 EXIT GLACIER ROAD NEAR SEWARD-- Continued

DATE	TOXA- PHENE SED, BM WS, <2MM DW, REC (UG/KG) (49351)	ENDO- SULFAN I, SED, BM WS, <2MM DW, REC (UG/KG) (49332)	ALPHA- BHC, SED, BM WS, <2MM DW, REC (UG/KG) (49338)	ALPHA- BHC, D6 SURROGT SED, BM WS, <2MM DW, REC PERCENT (49275)	BETA- BHC, SED, BM WS, <2MM DW, REC (UG/KG) (49339)	CIS- CHLOR- DANE, SED, BM WS, <2MM DW, REC (UG/KG) (49320)	CIS- NONA- CHLOR, SED, BM WS, <2MM DW, REC (UG/KG) (49316)	CIS- PER- METHRIN SED, BM WS, <2MM DW, REC (UG/KG) (49349)	O, P'- DDD, SED, BM WS, <2MM DW, REC (UG/KG) (49325)	O, P'- DDE, SED, BM WS, <2MM DW, REC (UG/KG) (49327)	O, P'- DDT, SED, BM WS, <2MM DW, REC (UG/KG) (49329)	METHOXY CHLOR, O, P'-, SED, BM WS, <2MM DW, REC (UG/KG) (49347)	P, P'- DDD, SED, BM WS, <2MM DW, REC (UG/KG) (49326)
	JUL 17... 17...	-- <200	-- <1	-- <1	-- 88	-- <1	-- <1	-- <1	-- <5	-- <1	-- <1	-- <2	-- <5
DATE	P, P'- DDE, SED, BM WS, <2MM DW, REC (UG/KG) (49328)	P, P'- DDT, SED, BM WS, <2MM DW, REC (UG/KG) (49330)	METHOXY CHLOR P, P'-, SED, BM WS, <2MM DW, REC (UG/KG) (49346)	TRANS- CHLOR- DANE, SED, BM WS, <2MM DW, REC (UG/KG) (49321)	TRANS- NONA- CHLOR, SED, BM WS, <2MM DW, REC (UG/KG) (49317)	TRANS- PER- METHRIN SED, BM WS, <2MM DW, REC (UG/KG) (49350)	ALUM- INUM BOT MAT <63U WS FIELD PERCENT (34790)	ANTI- MONY BOT MAT <63U WS FIELD (UG/G) (34795)	ARSENIC BOT MAT <63U WS FIELD (UG/G) (34800)	BARIUM BOT MAT <63U WS FIELD (UG/G) (34805)	BERYL- LIUM BOT MAT <63U WS FIELD (UG/G) (34810)	BISMUTH BOT MAT <180UWS FIELD (UG/G) (34816)	CADMIUM BOT MAT <63U WS FIELD (UG/G) (34825)
	JUL 17... 17...	-- <1	-- <2	-- <5	-- <1	-- <1	-- <5	-- 7.9	-- 2.3	-- 18	-- 710	-- 1.1	-- <1
DATE	CHRO- MIUM BOT MAT <63U WS FIELD (UG/G) (34840)	COPPER BOT MAT <63U WS FIELD (UG/G) (34850)	CALCIUM BOT MAT <63U WS FIELD PERCENT (34830)	COBALT BOT MAT <63U WS FIELD (UG/G) (34845)	CERIUM BOT MAT <63U WS FIELD (UG/G) (34835)	EURO- PIUM BOT MAT <63U WS FIELD (UG/G) (34855)	GOLD BOT MAT <63U WS FIELD (UG/G) (34870)	GALLIUM BOT MAT <63U WS FIELD (UG/G) (34860)	HOLMIUM BOT MAT <63U WS FIELD (UG/G) (34875)	IRON BOT MAT <63U WS FIELD PERCENT (34880)	LANTHA- NUM BOT MAT <63U WS FIELD (UG/G) (34885)	LEAD BOT MAT <63U WS FIELD (UG/G) (34890)	LITHIUM BOT MAT <63U WS FIELD (UG/G) (34895)
	JUL 17... 17...	-- 99	-- 68	-- 1.6	-- 17	-- 58	-- 1	-- <1	-- 16	-- <1	-- 3.8	-- 30	-- 13
DATE	MAGNE- SIUM BOT MAT <63U WS FIELD PERCENT (34900)	MANGA- NESE BOT MAT <63U WS FIELD (UG/G) (34905)	MERCURY BOT MAT <63U WS FIELD (UG/G) (34910)	MOLYB- DENUM BOT MAT <63U WS FIELD (UG/G) (34915)	NEODYM- IUM BOT MAT <63U WS FIELD (UG/G) (34920)	NICKEL BOT MAT <63U WS FIELD (UG/G) (34925)	NIOBIUM BOT MAT <63U WS FIELD (UG/G) (34930)	PHOS- PHORUS BOT MAT <63U WS FIELD PERCENT (34935)	SCAN- DIUM BOT MAT <63U WS FIELD (UG/G) (34945)	SELE- NIUM BOT MAT <63U WS FIELD (UG/G) (34950)	SILVER BOT MAT <63U WS FIELD (UG/G) (34955)	SODIUM BOT MAT <63U WS FIELD PERCENT (34960)	STRON- TIUM BOT MAT <63U WS FIELD (UG/G) (34965)
	JUL 17... 17...	-- 1.4	-- 670	-- .06	-- .7	-- 29	-- 44	-- 11	-- .160	-- 16	-- .3	-- .2	-- 2.5
DATE	SULFUR BOT MAT <63U WS FIELD PERCENT (34970)	TANTA- LUM BOT MAT <63U WS FIELD (UG/G) (34975)	THORIUM BOT MAT <63U WS FIELD (UG/G) (34980)	TIN BOT MAT <63U WS FIELD (UG/G) (34985)	TITA- NIUM, SED, BM WS, <63U DRY WGT REC PERCENT (49274)	URANIUM BOT MAT <63U WS FIELD (UG/G) (35000)	VANA- DIUM BOT MAT <63U WS FIELD (UG/G) (35005)	YTTRIUM BOT MAT <63U WS FIELD (UG/G) (35010)	YTTER- BIUM BOT MAT <63U WS FIELD (UG/G) (35015)	ZINC BOT MAT <63U WS FIELD (UG/G) (35020)	CARBON, ORGANIC SED, BM WS, <63U DW, REC (PER- CENT) (49266)	CARBON, INORG, SED, BM WS, <63U DW, REC (PER- CENT) (49269)	CARBON, ORG + INORG, SED, BM WS, <63U DW, REC PERCENT (49267)
	JUL 17... 17...	-- .09	-- <1	-- 6	-- 2	-- .520	-- 1.6	-- 130	-- 19	-- 2	-- 93	-- .38	-- .21
DATE	CARBON, ORG + INORG SED, BM WS, <2MM DW, REC (G/KG) (49272)	CARBON, INORG, SED, BM WS, <2MM DW, REC (G/KG) (49270)	CARBON, ORGANIC SED, BM WS, <2MM DW, REC (G/KG) (49271)	BENZENE 124TRI- CHLORO- SED, BM WS, <2MM DW, REC (UG/KG) (49438)	BENZENE O-DI- CHLORO- SED, BM WS, <2MM DW, REC (UG/KG) (49439)	NAPTHAL ENE, 12 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49403)	BENZENE M-DI- CHLORO- SED, BM WS, <2MM DW, REC (UG/KG) (49441)	BENZENE P-DI- CHLORO- SED, BM WS, <2MM DW, REC (UG/KG) (49442)	NAPTHAL ENE, 16 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49404)	9H-FLU- ORENE, 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49398)	PHENAN THRENE 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49410)	PYRENE, 1- METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49388)	2, 2'-BI QUINO- LINE, SED, BM WS, <2MM DW, REC (UG/KG) (49391)
	JUL 17... 17...	-- 3.5	-- .2	-- 3.3	-- <50	-- <50	-- <50	-- <50	-- <50	-- <50	-- <50	-- <50	-- <50

SOUTH-CENTRAL ALASKA

[illegible]

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

SOUTH-CENTRAL ALASKA

594734151142900 ANCHOR RIVER NEAR BALD MOUNTAIN NEAR HOMER

					DIS- CHARGE, INST. CUBIC	SAM- PLING			SPE- CIFIC	PH			BARO- METRIC		
DATE	TIME	MEDIUM CODE	SAMPLE TYPE	STREAM WIDTH (FT) (00004)	FEET PER SECOND (00061)	METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	PURPOSE SITE VISIT, (CODE) (50280)	CON- DUCT- ANCE (US/CM) (00095)	WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	PRES- SURE (MM OF HG) (00025)		
APR 24...	1530	9	9	56.0	382	10	3045	1006	61	7.4	6.5	3.0	741		
DATE		OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (MG/L) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00900)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
APR 24...	12.7	97	22	4.58	2.61	3.8	25	1.29	30	24	.6	2.8	<.2		
DATE		SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS DIS- TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHOR- DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	
APR 24...	21.0	60	53	.002	.210	.019	.28	.21	.110	.035	.030	510	68.6		
DATE		CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)								
APR 24...	4.6	2.0	.172	82	85	62									

SOUTH-CENTRAL ALASKA

[illegible]

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

SOUTH-CENTRAL ALASKA

15239840 ANCHOR RIVER ABOVE TWITTER CREEK NR HOMER

[illegible]

595126151391000 CHAKOK RIVER 7.5 MILE ABOVE MOUTH NEAR ANCHOR POINT

[illegible]

SOUTH-CENTRAL ALASKA

DATE	SILICA, DIS- SOLVED (MG/L AS STO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS N (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS N (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L) AS N (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. TOTAL (MG/L) AS N (00623)	PHOS- PHORUS DIS- SOLVED (MG/L) AS P (00665)	PHOS- PHORUS DIS- SOLVED (MG/L) AS P (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L) AS P (00671)	IRON, DIS- SOLVED (UG/L) AS FE (01046)	MANGA- NESE, DIS- SOLVED (UG/L) AS MN (01056)
	APR 24...	14.8	52	41	.001	.086	.005	.46	.25	.125	.025	.016	870
AUG 23...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	.001	.029	.014	.36	.22	.142	.064	.049	--	--

[illegible][illegible]

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	
	APR 16...	<.2	19.4	68	55	.002	.059	.003	.30	.20	.087	.033	.026	880
	AUG 20...	--	--	--	--	--	--	--	--	--	--	--	--	--
	20...	--	--	--	--	.002	.073	.013	.44	.37	.156	.051	.034	--

[illegible]

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

SOUTH-CENTRAL ALASKA

595506151403300 STARISKI CREEK 2 MILE BELOW UNNAMED TRIBUTARY NEAR NINILCHIK

					DIS- CHARGE, INST. CUBIC FEET PER SECOND (000004)	SAM- PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	PURPOSE SITE VISIT, (CODE) (50280)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
DATE	TIME	MEDIUM CODE	SAMPLE TYPE	STREAM WIDTH (FT) (000004)									
APR 20... AUG 24... 24...	1250 1341 1440	9 D 9	9 9 9	18.3 -- 15.0	48 -- 22	10 8010 10	3045 8010 3045	1006 1006 1006	68 -- 72	7.4 -- 7.2	6.0 -- 16.0	2.0 -- 10.0	759 -- 749
DATE	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
APR 20... AUG 24... 24...	13.6 -- 10.2	99 -- 92	24 -- --	5.18 -- --	2.70 -- --	3.3 -- --	31 -- --	1.40 -- --	38 -- --	30 -- --	.4 -- --	2.6 -- --	<.2 -- --
DATE	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. TOTAL (MG/L AS N) (00623)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTH., DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
APR 20... AUG 24... 24...	22.1 -- --	74 -- --	58 -- --	.002 -- .003	.102 -- .162	.004 -- .013	.37 -- .27	.19 -- .22	.116 -- .103	.040 -- .077	.034 -- .069	810 -- --	81.7 -- --
DATE	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	NITRO- GEN,PARTICULE WAT FLT SUSP (MG/L AS N) (49570)	CHLOR-A PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2) (70957)	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M (00572)	PERI- PHYTON BIOMASS DRY WEIGHT G/SQ M (00573)	PHEO- PHYTIN A, PERI- PHYTON (MG/M2) (62359)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SED. SIEVE % FINER THAN .062 MM (70331)				
APR 20... AUG 24... 24...	5.1 -- --	1.8 -- --	.153 -- --	-- 3.5 --	-- 37.7 --	-- 39.2 --	-- 1.4 --	33 -- --	4.2 -- --	72 -- --			

15240300 STARISKI CREEK NEAR ANCHOR POINT

[illegible]

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

SOUTH-CENTRAL ALASKA

15240300 STARISKI CREEK NEAR ANCHOR POINT--Continued

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
APR 17...	13.3	54	41	.001	.029	.007	.48	.24	.128	.032	.023	1250	161
AUG 25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	.002	.106	.015	.29	.23	.121	.081	.071	--	--
DATE	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	CHLOR-A PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2) (70957)	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M (00572)	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M (00573)	PHEO- PHYTIN A, PERI- PHYTON (MG/M2) (62359)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (MG/L) (80155)	SED. SUSP. DIS- SIEVE DIAM. % FINER THAN .062 MM (70331)			
APR 17...	7.6	2.1	.167	--	--	--	--	130	58	50			
AUG 25...	--	--	--	.9	46.2	47.4	.9	--	--	--			
25...	--	--	--	--	--	--	--	--	--	--			

600107151112800 NORTH FORK DEEP CREEK 4 MILE ABOVE MOUTH NEAR NINILCHIK

DATE	TIME	MEDIUM CODE	SAMPLE TYPE	STREAM WIDTH (FT) (00004)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM- PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	PURPOSE SITE VISIT, (CODE) (50280)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
APR 25...	1340	9	9	21.0	32	10	3045	1006	72	7.8	8.5	3.0	722
AUG 30...	1305	D	9	--	--	8010	8010	1006	--	--	--	--	--
30...	1500	9	9	21.5	31	10	3045	1006	63	7.6	13.0	9.5	--
DATE	OXYGEN, DIS- SOLVED (MG/L AS C) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS C) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ANC WATER FET FIELD MG/L AS CACO3 (00410)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
APR 25...	12.6	99	28	5.39	3.55	3.4	35	1.38	42	35	.7	1.2	E.1
AUG 30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
APR 25...	27.4	82	64	<.001	.013	<.002	E.05	<.10	.023	.019	.018	50	22.7
AUG 30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	<.001	.006	.003	E.08	.11	.022	.020	.015	--	--
DATE	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	CHLOR-A PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2) (70957)	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M (00572)	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M (00573)	PHEO- PHYTIN A, PERI- PHYTON (MG/M2) (62359)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (MG/L) (80155)				
APR 25...	1.7	E.2	E.026	--	--	--	--	2	.17				
AUG 30...	--	--	--	1.4	46.0	49.6	1.8	--	--				
30...	--	--	--	--	--	--	--	--	--				

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

SOUTH-CENTRAL ALASKA

600204151401800 DEEP CREEK 0.6 MILE ABOVE STERLING HIGHWAY NEAR NINILCHIK

					DIS- CHARGE, INST. CUBIC				SPE- CIFIC CON- DUCT- ANCE	PH WATER WHOLE FIELD (STAND- ARD	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)
DATE	TIME	MEDIUM CODE	SAMPLE TYPE	STREAM WIDTH (FT) (00004)	FEET PER SECOND (00061)	SAM- PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	PURPOSE SITE VISIT, (CODE) (50280)	(US/CM) (00095)	UNITS (00400)	(DEG C) (00020)	(DEG C) (00010)	(00025)
APR 18...	1640	9	9	80.0	285	10	3045	1006	70	7.5	5.5	3.0	763
AUG 21...	1602	D	9	--	--	8010	8010	1006	--	--	--	--	--
21...	1700	9	9	57.0	258	10	3045	1006	64	7.6	18.0	12.5	752

[illegible]

DATE	SILICA, DIS- SOLVED (MG/L AS ST02) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L) AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L) AS N) (00623)	PHOS- PHORUS TOTAL (MG/L) AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L) AS P) (00666)	PHOS- PHORUS DIS- SOLVED (MG/L) AS P) (00671)	IRON, DIS- SOLVED (UG/L) AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L) AS MN) (01056)	
	APR 18...	21.2	75	57	.002	.067	.004	.54	.17	.215	.033	.027	640	63.6
	AUG 21...	--	--	--	--	--	--	--	--	--	--	--	--	--
	21...	--	--	--	<.001	.017	<.002	.27	.21	.064	.040	.029	--	--

[illegible]

600945151210900 NINILCHIK RIVER 1.5 MILE BELOW TRIBUTARY 1 NEAR NINILCHIK

DATE	TIME	MEDIUM CODE	SAMPLE TYPE	STREAM WIDTH (FT) (00004)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM- PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	PURPOSE SITE VISIT, (CODE) (50280)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)
APR 23...	1450	9	9	99.5	171	70	3045	1006	47	7.4	.5	747	11.4
AUG 23...	1340	9	9	9.50	17	10	3045	1006	89	7.0	8.0	742	9.0

[illegible]

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

SOUTH-CENTRAL ALASKA

600945151210900 NINILCHIK RIVER 1.5 MILE BELOW TRIBUTARY 1 NEAR NINILCHIK--Continued

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS N (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS N (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L) AS N (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. TOTAL (MG/L) AS N (00623)	PHOS- PHORUS TOTAL (MG/L) AS P (00665)	PHOS- PHORUS DIS- SOLVED (MG/L) AS P (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L) AS P (00671)	IRON, DIS- SOLVED (UG/L) AS FE (01046)	MANGA- NESE, DIS- SOLVED (UG/L) AS MN (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L) AS C (00681)
APR 23...	45	40	.001	<.005	.004	.28	.23	.097	.058	.051	930	99.2	6.7
AUG 23...	--	--	.002	.153	.012	.29	.24	.088	.058	.044	--	--	--
DATE	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L) AS C (00694)	NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L) AS N (49570)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)									
APR 23...	.6	.056	10	4.6									
AUG 23...	--	--	--	--									

600321151325000 NINILCHIK RIVER BELOW TRIBUTARY 3 NEAR NINILCHIK

DATE	TIME	MEDIUM CODE	SAMPLE TYPE	STREAM WIDTH (FT) (00004)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM- PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	PURPOSE SITE VISIT, CODES (50280)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
APR 18...	1150	9	9	41.0	225	10	3045	1006	76	7.8	6.0	.5	759
AUG 21...	1110	D	9	--	--	8010	8010	1006	--	--	--	--	760
21...	1250	9	9	30.0	113	10	3045	1006	91	7.6	19.5	11.0	749
DATE	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L) AS CACO3 (00900)	CALCIUM DIS- SOLVED (MG/L) AS CA (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L) AS MG (00925)	SODIUM, DIS- SOLVED (MG/L) AS NA (00930)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	POTAS- SIUM, DIS- SOLVED (MG/L) AS K (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L) AS SO4 (00945)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL (00940)	FLUO- RIDE, DIS- SOLVED (MG/L) AS F (00950)
APR 18...	12.7	88	27	6.19	2.84	3.9	34	1.75	42	34	.2	1.9	<.2
AUG 21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	9.1	84	--	--	--	--	--	--	--	--	--	--	--
DATE	SILICA, DIS- SOLVED (MG/L) AS SIO2 (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS N (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS N (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L) AS N (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. TOTAL (MG/L) AS N (00623)	PHOS- PHORUS TOTAL (MG/L) AS P (00665)	PHOS- PHORUS DIS- SOLVED (MG/L) AS P (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L) AS P (00671)	IRON, DIS- SOLVED (UG/L) AS FE (01046)	MANGA- NESE, DIS- SOLVED (UG/L) AS MN (01056)
APR 18...	19.1	85	58	.002	.037	.018	.55	.26	.198	.054	.045	1110	191
AUG 21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	.003	.036	.029	.38	.33	.143	.080	.061	--	--
DATE	CARBON, ORGANIC DIS- SOLVED (MG/L) AS C (00681)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L) AS C (00694)	NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L) AS N (49570)	CHLOR-A PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/L) AS N (70957)	PERI- PHYTON BIOMASS BIOMASS WEIGHT G/SQ M (00572)	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M (00573)	PHEO- PHYTIN A, PERI- PHYTON (MG/M2) (62359)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)			
APR 18...	7.5	2.4	.191	--	--	--	--	69	42	73			
AUG 21...	--	--	--	.8	39.6	40.8	.2	--	--	--			
21...	--	--	--	--	--	--	--	--	--	--			

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

SOUTH-CENTRAL ALASKA

15273040 RABBIT CREEK AT PORCUPINE TRAIL ROAD NEAR ANCHORAGE

					DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM- PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	PURPOSE SITE VISIT, (CODE) (50280)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DATE	TIME	MEDIUM CODE	SAMPLE TYPE	STREAM WIDTH (FT) (00004)									
JUL 05... 05...	0955 1855	9 9	9 9	17.2 --	56 58	10 10	3045 3045	1099 1006	68 63	7.1 7.7	6.0 6.7	738 738	11.4 11.1
DATE	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC (UG/L) (46342)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	BEN- FLUR- ALIN WAT FLD 0.7 U (UG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CARBO- FURAN WATER FLTRD 0.7 U (UG/L) (82674)	CAR- BARYL WATER FLTRD 0.7 U (UG/L) (82680)	CHLOR- PYRIFOS WATER, DISS, REC (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U (UG/L) (82682)	P,P' DDE DISSOLV (UG/L) (34653)
JUL 05... 05...	95 94	<.004 <.004	<.002 <.002	<.007 <.007	<.005 <.005	<.010 <.010	<.002 <.002	<.020 <.020	<.041 E.004	<.005 <.005	<.018 <.018	<.003 <.003	<.003 <.003
DATE	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U (UG/L) (82660)	DISUL- FOTON WATER FLTRD 0.7 U (UG/L) (82677)	ETHAL- FLUR- ALIN WAT FLT 0.7 U (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U (UG/L) (82672)	EPTC WATER FLTRD 0.7 U (UG/L) (82668)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)
JUL 05... 05...	<.006 <.006	<.005 <.005	<.005 <.005	<.002 <.002	<.021 <.021	<.009 <.009	<.005 <.005	<.002 <.002	<.003 <.003	<.004 <.004	<.035 <.035	<.027 <.027	<.013 <.013
DATE	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	METHYL AZIN- PHOS WAT FLT 0.7 U (UG/L) (82686)	MOL- INATE WATER FLTRD 0.7 U (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U (UG/L) (82684)	PARA- THION, DIS- SOLVED (UG/L) (39542)	METHYL PARA- THION WAT FLT 0.7 U (UG/L) (82667)	PEB- ULATE WATER FILTRD 0.7 U (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U (UG/L) (82664)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U (UG/L) (82676)
JUL 05... 05...	<.006 <.006	<.050 <.050	<.002 <.002	<.007 <.007	<.007 <.007	<.006 <.006	<.002 <.002	<.010 <.010	<.006 <.006	<.011 <.011	<.010 <.010	<.015 <.015	<.004 <.004
DATE	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U (UG/L) (82681)							
JUL 05... 05...	<.023 <.023	<.011 <.011	<.016 <.016	<.034 <.034	<.017 <.017	<.005 <.005							

SOUTH-CENTRAL ALASKA

				DIS-CHARGE, INST. CUBIC FEET PER SECOND (00004) (00061)		SAMPLING METHOD, CODES (82398) (84164)		PURPOSE SITE VISIT, (CODE) (50280)		SPECIFIC CONDUCTANCE (US/CM) (00095)		PH WATER WHOLE FIELD (STANDARD WATER (DEG C) (00010)		BAROMETRIC PRES-SURE (MM OF HG) (00025)		OXYGEN, DIS-SOLVED (MG/L) (00300)	
DATE	TIME	MEDIUM CODE	SAMPLE TYPE	STREAM WIDTH (FT)													
JUL 05...	1110	9	9	13.0	16	10	3045	1099	113	8.1	7.5	738	10.6				
05...	1925	9	9	--	11	10	3045	1006	112	8.1	8.0	738	10.5				
		OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	ACETO-CHLOR, WATER, FLTRD REC (49260)	ALA-CHLOR, WATER, DISS, REC (46342)	ATRA-ZINE, WATER, DISS, REC (39632)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	BEN-FLUR-ALIN WAT FLD 0.7 U REC (82673)	BUTYL-ATE, WATER, DISS, REC (04028)	CARBO-FURAN, WATER, FLTRD 0.7 U REC (82674)	CAR-BARYL, WATER, FLTRD 0.7 U REC (82680)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (04041)	DCPA, WATER, FLTRD 0.7 U REC (82682)	P,P' DDE DISSOLVED (UG/L) (34653)			
DATE																	
JUL 05...	91	<.004	<.002	<.007	<.005	<.010	<.002	<.020	E.008	<.005	<.018	<.003	<.003				
05...	92	<.004	<.002	<.007	<.005	<.010	<.002	<.020	E.002	<.005	<.018	<.003	<.003				
		DEETHYL ATRA-ZINE, WATER, DISS, REC (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U REC (82660)	DISUL-FOTON WATER FLTRD 0.7 U (UG/L) (82677)	ETHAL-FLUR-ALIN WAT FLT 0.7 U (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U (UG/L) (82672)	EPTC WATER FLTRD 0.7 U (UG/L) (82668)	FONOFOS WATER DISS REC (04095)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U REC (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METO-LACHLOR, WATER DISSOLVED (UG/L) (39415)			
DATE																	
JUL 05...	<.006	<.005	<.005	<.002	<.021	<.009	<.005	<.002	<.003	<.004	<.035	<.027	<.013				
05...	<.006	<.005	<.005	<.002	<.021	<.009	<.005	<.002	<.003	<.004	<.035	<.027	<.013				
		METRI-BUZIN SENCOR WATER DISSOLV (82630)	METHYL AZIN-PHOS WAT FLT 0.7 U REC (82686)	MOL-INATE WATER FLTRD 0.7 U REC (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U REC (82684)	PARA-THION, DIS-SOLVED (UG/L) (39542)	METHYL PARA-THION WAT FLT 0.7 U REC (82667)	PEB-ULATE WATER FILTRD 0.7 U REC (82669)	PENDI-METH-ALIN WAT FLT 0.7 U REC (82683)	PER-METHRIN CIS WAT FLT 0.7 U REC (82687)	PHORATE WATER FLTRD 0.7 U REC (82664)	PROPA-CHLOR, WATER, DISS, REC (04024)	PRO-METON, WATER, DISS, REC (04037)	PRON-AMIDE WATER FLTRD 0.7 U REC (82676)			
DATE																	
JUL 05...	<.006	<.050	<.002	<.007	<.007	<.006	<.002	<.010	<.006	<.011	<.010	<.015	<.004				
05...	<.006	<.050	<.002	<.007	<.007	<.006	<.002	<.010	<.006	<.011	<.010	<.015	<.004				
		PRO-PARGITE WATER FLTRD 0.7 U REC (82685)	SI-MAZINE, WATER, DISS, REC (04035)	TEBU-THIURON FLTRD 0.7 U REC (82670)	TER-BACIL WATER FLTRD 0.7 U REC (82665)	TER-BUFOS WATER FLTRD 0.7 U REC (82675)	THIO-BENCARB WATER FLTRD 0.7 U REC (82681)										
DATE																	
JUL 05...	<.023	<.011	<.016	<.034	<.017	<.005											
05...	<.023	<.011	<.016	<.034	<.017	<.005											

[illegible]

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

SOUTH-CENTRAL ALASKA

15274796 SOUTH BRANCH OF SOUTH FORK CHESTER CREEK AT TANK TRAIL NEAR ANCHORAGE

DATE	TIME	MEDIUM CODE	SAMPLE TYPE	STREAM WIDTH (FT) (000004)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (000009)	SAMPLE LOC- ATION, CROSS SECTION (FT FM R BK) (72103)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM- PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	PURPOSE SITE VISIT, (CODE) (50280)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)
OCT 31...	1440	H	9	7.00	10.0	3.0	4.4	8010	8010	3003	113	7.9	.5
DATE	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	ALUM- INUM BOT MAT <63U WS FIELD PERCENT (34790)	ANTI- MONY BOT MAT <63U WS FIELD (UG/G) (34795)	ARSENIC BOT MAT <63U WS FIELD (UG/G) (34800)	BARIUM BOT MAT <63U WS FIELD (UG/G) (34805)	BERYL- LIUM BOT MAT <63U WS FIELD (UG/G) (34810)	BISMUTH BOT MAT <180UWS FIELD (UG/G) (34816)	CADMIUM BOT MAT <63U WS FIELD (UG/G) (34825)	CHRO- MIUM BOT MAT <63U WS FIELD (UG/G) (34840)	COPPER BOT MAT <63U WS FIELD (UG/G) (34850)
OCT 31...	1.5	739	13.9	102	6.7	.8	17	550	1.0	<1	.2	200	42
DATE	CALCIUM BOT MAT <63U WS FIELD PERCENT (34830)	COBALT BOT MAT <63U WS FIELD (UG/G) (34845)	CERIUM BOT MAT <63U WS FIELD (UG/G) (34835)	EURO- PIUM BOT MAT <63U WS FIELD (UG/G) (34855)	GOLD BOT MAT <63U WS FIELD (UG/G) (34870)	GALLIUM BOT MAT <63U WS FIELD (UG/G) (34860)	HOLMIUM BOT MAT <63U WS FIELD (UG/G) (34875)	IRON BOT MAT <63U WS FIELD PERCENT (34880)	LANTHA- NUM BOT MAT <63U WS FIELD (UG/G) (34885)	LEAD BOT MAT <63U WS FIELD (UG/G) (34890)	LITHIUM BOT MAT <63U WS FIELD (UG/G) (34895)	MAGNE- SIUM BOT MAT <63U WS FIELD PERCENT (34900)	MANGA- NESE BOT MAT <63U WS FIELD (UG/G) (34905)
OCT 31...	2.1	20	34	1	<1	15	<1	4.6	18	12	37	1.4	1500
DATE	MERCURY BOT MAT <63U WS FIELD (UG/G) (34910)	MOLYB- DENUM BOT MAT <63U WS FIELD (UG/G) (34915)	NEODYM- IUM BOT MAT <63U WS FIELD (UG/G) (34920)	NICKEL BOT MAT <63U WS FIELD (UG/G) (34925)	NIOBIUM BOT MAT <63U WS FIELD (UG/G) (34930)	PHOS- PHORUS BOT MAT <63U WS FIELD PERCENT (34935)	SCAN- DIUM BOT MAT <63U WS FIELD (UG/G) (34945)	SELE- NIUM BOT MAT <63U WS FIELD (UG/G) (34950)	SILVER BOT MAT <63U WS FIELD (UG/G) (34955)	SODIUM BOT MAT <63U WS FIELD PERCENT (34960)	STRON- TIUM BOT MAT <63U WS FIELD (UG/G) (34965)	SULFUR BOT MAT <63U WS FIELD PERCENT (34970)	TANTA- LUM BOT MAT <63U WS FIELD (UG/G) (34975)
OCT 31...	.16	2.3	17	47	10	.160	17	2.5	.1	1.6	290	.12	<1
DATE	THORIUM BOT MAT <63U WS FIELD (UG/G) (34980)	TIN BOT MAT <63U WS FIELD (UG/G) (34985)	TITA- NIUM, SED, BM WS, <63U DRY WGT REC PERCENT (49274)	URANIUM BOT MAT <63U WS FIELD (UG/G) (35000)	VANA- DIUM BOT MAT <63U WS FIELD (UG/G) (35005)	YTTRIUM BOT MAT <63U WS FIELD (UG/G) (35010)	YTTER- BIUM BOT MAT <63U WS FIELD (UG/G) (35015)	ZINC BOT MAT <63U WS FIELD (UG/G) (35020)	CARBON, ORGANIC SED, BM WS, <63U DW, REC (PER- CENT) (49266)	CARBON, INORG, SED, BM WS, <63U DW, REC (PER- CENT) (49269)	CARBON, ORG + INORG, SED, BM WS, <63U DW, REC (PER- CENT) (49267)		
OCT 31...	4	1	.550	2.2	160	18	2	110	7.1	.05	7.2		

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

SOUTH-CENTRAL ALASKA

15283550 MOOSE CREEK ABOVE WISHBONE HILL NEAR SUTTON

DATE	TIME	MEDIUM CODE	SAMPLE TYPE	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	SAM- PLING METHOD, CODES (82398)	STREAM WIDTH (FT) (00004)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
MAR 27...	1030	9	9	8.7	5	10	28.0	713	12.9	95	7.8	129	.3
JUN 19...	1100	9	9	254	--	10	--	737	12.4	102	7.1	51	5.5
DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
MAR 27...	52	17.9	1.82	.52	4.6	32	33	38	6.5	<.2	6.2	15.6	82
JUN 19...	22	7.42	.725	.29	.8	18	19	23	.4	<.2	3.5	4.6	43
DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
MAR 27...	73	.014	E.06	E.05	.328	.001	<.022	<.006	E.005	E.002	<.1	<.1	.36
JUN 19...	29	.002	.12	<.08	.076	<.001	<.022	<.006	<.007	.019	.2	--	.57
DATE	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	CYANIDE TOTAL (MG/L AS CN) (00720)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
MAR 27...	<.1	<28	E1	33.3	<2.50	<.11	<1	<1.8	<.01	<10	<10	<1	<3.2
JUN 19...	--	212	E1	22.3	<2.50	<.10	<1	1.2	<.01	<10	220	<1	<3.0
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	PURPOSE SITE VISIT, (CODE) (50280)	SAMPLER TYPE (CODE) (84164)			
MAR 27...	<3	<.14	<2	<2.6	<.43	<31	<1	--	1099	3045			
JUN 19...	5	.01	<2	<3.0	<.40	<31	17	12	1099	3045			

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

SOUTHWEST ALASKA

604504152514600 TLIKAKILA RIVER NEAR SUMMIT LAKE NEAR PORT ALSWORTH

DATE	TIME	MEDIUM CODE	SAMPLE TYPE	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (MG/L) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
SEP 2001 17...	1530	9	9	739	12.1	100	7.2	58	6.0	22	8.24	.438	1.44
DATE		ALKA- LITY WAT DIS TOT IT FIELD (MG/L AS NA) (00930)	ANC WATER UNFLTRD FET FIELD (MG/L AS CACO3) (39086)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	H-2 / H-1 STABLE ISOTOPE RATIO PER MIL (82082)
SEP 17...	.8	19	20	25	.3	<.2	3.2	5.1	29	32	40	12.0	-146
DATE		O-18 / O-16 STABLE ISOTOPE RATIO PER MIL (82085)											
SEP 17...	-19.17												

604529152520600 GLACIER FORK NEAR SUMMIT LAKE NEAR PORT ALSWORTH

DATE	TIME	MEDIUM CODE	SAMPLE TYPE	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (MG/L) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
SEP 17...	1600	9	9	739	12.2	99	7.4	48	5.3	23	8.37	.469	1.33
DATE		ALKA- LITY WAT DIS TOT IT FIELD (MG/L AS NA) (00930)	ANC WATER UNFLTRD FET FIELD (MG/L AS CACO3) (39086)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	H-2 / H-1 STABLE ISOTOPE RATIO PER MIL (82082)
SEP 17...	.7	17	18	22	.2	<.2	2.8	6.9	56	32	30	3.3	-147
DATE		O-18 / O-16 STABLE ISOTOPE RATIO PER MIL (82085)											
SEP 17...	-19.59												

604011153081400 TLIKAKILA RIVER ABOVE NORTH FORK TLIKAKILA RIVER NEAR PORT ALSWORTH

DATE	TIME	MEDIUM CODE	SAMPLE TYPE	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (MG/L) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
SEP 17...	1245	9	9	744	12.7	101	7.0	47	4.7	20	7.32	.486	1.23

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

SOUTHWEST ALASKA

60401153081400 TLIKAKILA RIVER ABOVE NORTH FORK TLIKAKILA RIVER NEAR PORT ALSWORTH--Continued

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	ANC WATER UNFLTRD FET FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	H-2 / H-1 STABLE ISOTOPE RATIO PER MIL (82082)
SEP 17...	.8	17	18	22	.4	<.2	3.7	4.9	30	30	30	5.8	-146
DATE	O-18 / O-16 STABLE ISOTOPE RATIO PER MIL (82085)												
SEP 17...	-19.35												

604015153082300 NORTH FORK TLIKAKILA RIVER AT MOUTH NEAR PORT ALSWORTH

DATE	TIME	MEDIUM CODE	SAMPLE TYPE	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L AS CL) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
SEP 17...	1220	9	9	745	12.6	100	6.8	45	4.8	18	6.46	.561	1.01
DATE	O-18 / O-16 STABLE ISOTOPE RATIO PER MIL (82085)												
SEP 17...	-19.40												

603205153315900 TLIKAKILA RIVER 12 MILE ABOVE MOUTH NEAR PORT ALSWORTH

DATE	TIME	MEDIUM CODE	SAMPLE TYPE	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L AS CL) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
SEP 17...	1320	9	9	754	12.3	99	7.1	54	5.8	22	7.78	.580	1.24

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

SOUTHWEST ALASKA

603205153315900 TLIKAKILA RIVER 12 MILE ABOVE MOUTH NEAR PORT ALSWORTH--Continued

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	ANION WATER UNFLTRD FET FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	H-2 / H-1 STABLE ISOTOPE RATIO PER MIL (82082)
SEP 17...	.9	18	19	23	.5	<.2	4.3	5.1	35	32	30	4.9	-144

	O-18 /
	O-16
	STABLE
	ISOTOPE
	RATIO
DATE	PER
	MIL
	(82085)
SEP	
17...	-19.18

15297970 TLIKAKILA RIVER AT MOUTH NEAR PORT ALSWORTH

DATE	TIME	MEDIUM CODE	SAMPLE TYPE	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	H-2 / H-1 STABLE RATIO PER MIL (82082)	O-18 / O-16 STABLE RATIO PER MIL (82085)
SEP 17...	1400	9	9	757	12.1	101	7.1	60	7.1	-142	-19.03

15300700 ALAGNAK RIVER BELOW NONVIANUK RIVER NEAR IGIUGIG

DATE	TIME	MEDIUM CODE	SAMPLE TYPE	STREAM WIDTH (FT) (00004)	SECTION (FT FM R BK) (72103)	SAMPLE	DIS-	SAM-	SAMPLER	DUCT-	PH	TEMPER-	TEMPER-	BARO-
						LOC- ATION, CROSS SECTION	CHARGE, INST. CUBIC FEET PER SECOND				PLING METHOD, CODES (82398)			
FEB														
27...	1530	9	9	251	--	1420	20	3044	43	7.3	.5	--	715	
27...	1542	9	9	--	12.0	--	--	--	42	7.1	--	.5	715	
27...	1544	9	9	--	68.0	--	--	--	40	7.2	--	1.0	715	
27...	1546	9	9	--	77.0	--	--	--	39	7.2	--	.5	--	
27...	1548	9	9	--	116.0	--	--	--	40	7.2	--	1.0	715	
27...	1550	9	9	--	154.0	--	--	--	40	7.2	--	1.0	--	
27...	1552	9	9	--	231.0	--	--	--	40	7.3	--	.5	715	

[illegible]

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

SOUTHWEST ALASKA

15300700 ALAGNAK RIVER BELOW NONVIANUK RIVER NEAR IGIUGIG--Continued

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
FEB													
27...	4.3	22	26	.001	.028	.003	.08	.11	E.003	<.006	<.007	M	<3.2
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
DATE	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)									
FEB													
27...	.84	<.2	1	3.8									
27...	--	--	--	--									
27...	--	--	--	--									
27...	--	--	--	--									
27...	--	--	--	--									
27...	--	--	--	--									
27...	--	--	--	--									
27...	--	--	--	--									

15300730 ALAGNAK RIVER 27 MILES ABOVE MOUTH NEAR MCCORMICK NEAR LEVELOCK

DATE	TIME	MEDIUM CODE	SAMPLE TYPE	STREAM WIDTH (FT) (00004)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM- PLING PER METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L CACO3) (00900)	CALCIUM SOLVED AS (MG/L AS CA) (00915)
FEB													
28...	1540	9	9	163	1420	20	3044	-4.5	.00	739	12.5	16	4.54
DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00613)
FEB													
28...	1.05	2.2	16	.34	18	15	5.3	1.9	<.2	6.0	31	30	<.001
DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
FEB													
28...	.011	<.002	.10	<.10	.014	E.004	<.007	20	8.4	.91	.3	9	35

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

YUKON ALASKA

15389000 PORCUPINE RIVER NEAR FORT YUKON

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM R BK) (72103)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (MG/L) (00301)
JUN								
30...	1726	160.0	174	7.2	16.5	734	8.9	95
30...	1728	330.0	175	7.1	16.5	734	9.1	97
30...	1730	525.0	174	7.2	16.5	734	8.8	94
30...	1737	725.0	173	7.3	16.5	734	8.8	94
30...	1739	940.0	173	7.3	17.0	734	8.8	95
JUL								
16...	1446	970.0	154	7.3	16.0	752	9.0	92
16...	1448	744.0	152	7.3	16.0	752	8.9	92
16...	1449	532.0	154	7.3	16.0	752	9.0	92
16...	1450	346.0	155	7.3	16.0	752	9.0	92
16...	1451	163.0	155	7.3	16.0	752	8.9	92
AUG								
07...	1441	929.0	244	8.0	13.2	--	10.5	--
07...	1443	718.0	244	7.9	13.1	--	10.5	--
07...	1444	520.0	244	7.9	13.1	--	10.6	--
07...	1445	255.0	244	8.0	13.1	--	10.5	--
07...	1446	183.0	244	8.0	13.1	--	10.4	--
27...	1538	1025	223	7.7	11.5	752	10.2	95
27...	1542	850.0	224	7.6	11.5	752	10.2	95
27...	1544	664.0	224	7.6	11.5	752	10.2	95
27...	1546	483.0	225	7.6	11.5	752	10.2	95
27...	1548	276.0	225	7.6	11.5	752	10.3	96
SEP								
17...	1544	268.0	183	7.7	7.0	756	11.6	96
17...	1545	465.0	182	7.7	7.0	756	11.6	96
17...	1547	655.0	183	7.7	7.0	756	11.6	96
17...	1548	840.0	182	7.7	7.0	756	11.6	96
17...	1549	1032	181	7.7	7.0	756	11.6	96

DATE	TIME	MEDIUM CODE	SAMPLE TYPE	STREAM WIDTH (FT) (00004)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM- PLING METHOD, TYPE CODES (82398)	SAMPLER TYPE (CODE) (84164)	QUALITY ASSUR- ANCE DATA INDICA- TOR CODE (99111)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)
MAR													
29...	1630	9	9	--	--	1090	20	3044	30	376	7.6	-21.0	.00
JUN													
30...	1600	9	9	1210	14.05	20500	20	3055	100	173	7.7	24.0	16.5
JUL													
16...	1400	9	9	1250	14.45	24200	20	3055	30	154	7.3	19.5	16.0
AUG													
07...	1330	9	7	1160	13.44	16700	20	3055	100	244	7.9	--	13.1
27...	1500	9	9	1190	--	18800	20	3055	30	224	7.6	14.0	11.2
SEP													
17...	1320	9	9	1200	13.58	18900	20	3055	30	182	7.7	--	7.2

DATE	TUR- BID- ITY (NTU) (00076)	TURBID- ITY LAB 2100AN (NTU) (99872)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
MAR													
29...	.5	3.9	.047	.034	758	5.2	36	200	58.9	12.1	4.5	141	.57
JUN													
30...	--	17	.377	.276	734	8.9	95	86	26.1	5.15	2.2	58	.54
JUL													
16...	--	18	--	--	752	9.0	92	78	22.8	5.00	2.0	50	.48
AUG													
07...	--	10	.185	.135	--	10.5	--	120	33.7	7.72	2.9	74	.52
27...	--	14	.237	.173	752	10.2	94	110	31.8	7.13	2.3	71	.42
SEP													
17...	--	26	.451	.333	756	11.6	97	90	26.1	5.97	2.3	58	.44

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

YUKON ALASKA

15389000 PORCUPINE RIVER NEAR FORT YUKON--Continued

DATE	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CARBONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITROGEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITROGEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
MAR 29...	171	--	141	35.1	4.2	<.2	4.1	233	205	<.001	.204	.008	E.07
JUN 30...	68	.0	55	23.0	.8	E.1	3.2	131	95	.002	.017	.003	.36
JUL 16...	59	.0	49	22.9	.6	<.2	3.6	125	87	.001	.014	.005	.42
AUG 07...	89	.0	73	44.6	1.1	<.2	3.2	144	138	.001	.013	<.002	.22
27...	84	.0	69	39.0	.8	E.1	3.6	168	127	<.001	.035	<.002	.27
SEP 17...	70	.0	58	33.2	.8	<.2	4.6	142	109	.002	.029	.007	.34
DATE	NITROGEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOSPHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	NITROGEN, TOTAL, SEDIMENT (WEIGHT PERCENT (62845)	PHOSPHORUS SEDIMENT (MG/L SUSP. PERCENT (30292)	ALUMINUM SEDIMENT (MG/L SUSP. PERCENT (30221)	ALUMINUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTIMONY SEDIMENT (UG/L SUSP. (29816)	ANTIMONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC SEDIMENT (UG/L SUSP. (29818)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM SEDIMENT (UG/L SUSP. (29820)
MAR 29...	E.08	E.003	<.006	<.007	--	--	--	2	--	.05	--	.2	--
JUN 30...	.28	.037	.007	<.007	--	.11	8.6	32	1.8	.13	17	.4	1000
JUL 16...	.32	.030	.007	<.007	--	.12	7.8	49	1.7	.11	17	.4	1200
AUG 07...	.18	.016	<.006	<.007	--	.12	7.6	24	1.8	.09	26	.3	1100
27...	.22	.024	E.004	<.007	--	.13	7.9	25	1.4	.09	20	.3	1000
SEP 17...	.32	.032	E.005	<.007	.44	.12	8.4	103	2.0	.10	20	.3	1500
DATE	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYLLIUM SEDIMENT (UG/L SUSP. (29822)	BERYLLIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM SEDIMENT (UG/L SUSP. (29826)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHROMIUM SEDIMENT (UG/L SUSP. (29829)	CHROMIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT SEDIMENT (UG/L SUSP. (35031)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER SEDIMENT (UG/L SUSP. (29832)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON SEDIMENT (UG/L SUSP. (30269)
MAR 29...	90.9	--	<.06	10	--	<.04	--	<.8	--	.12	--	.7	--
JUN 30...	53.8	2	<.06	E6	.8	<.04	130	E.4	19	.09	34	2.4	4.3
JUL 16...	57.5	2	<.06	7	.6	E.03	160	E.6	22	.09	37	2.8	4.5
AUG 07...	66.5	2	<.06	9	1.4	<.04	170	<.8	26	.08	39	1.9	4.9
27...	57.5	2	<.06	E7	.8	<.04	170	E.6	21	.09	33	1.6	4.8
SEP 17...	51.5	3	<.06	E4	1.6	E.03	140	E.6	25	.15	41	2.9	5.2
DATE	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD SEDIMENT (UG/L SUSP. (29836)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM SEDIMENT (UG/L SUSP. (35050)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGANESE SEDIMENT (UG/L SUSP. (29839)	MANGANESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY SEDIMENT (UG/L SUSP. (29841)	MOLYBDENUM SEDIMENT (UG/L SUSP. (29843)	MOLYBDENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL SEDIMENT (UG/L SUSP. (29845)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELENIUM SEDIMENT (UG/L SUSP. (29847)
MAR 29...	10	--	<.08	--	6.2	--	10.9	--	--	.6	--	.69	--
JUN 30...	190	22	.22	65	3.1	940	2.7	.22	4	.4	81	2.04	1
JUL 16...	220	26	.10	73	2.9	890	2.7	.19	7	.3	100	2.36	2
AUG 07...	70	37	E.06	59	4.1	1300	2.4	.16	8	.5	110	.98	2
27...	90	32	E.06	63	3.9	1000	2.5	.09	7	.4	94	1.39	1
SEP 17...	350	26	.09	79	4.5	930	4.9	.03	4	.3	140	3.81	2

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

YUKON ALASKA

15389000 PORCUPINE RIVER NEAR FORT YUKON--Continued

DATE	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER SED. (UG/G) (29850)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM SEDI- MENT (UG/G) (35040)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	THAL- LIUM SUS SED (UG/G) (49955)	TITA- NIUM SEDI- MENT (UG/G) PERCENT (30317)	VANA- DIUM SED. (UG/G) (29853)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC SED. (UG/G) (29855)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM SEDI- MENT (UG/G) (35046)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
MAR 29...	.4	--	<1.0	--	155	--	--	--	1.0	--	2	--	.74
JUN 30...	<.3	<1	<1.0	150	76.7	<100	.470	200	.5	240	1	<100	.32
JUL 16...	<.3	1	<1.0	140	73.8	<100	.470	220	.3	310	2	<100	.24
AUG 07...	.4	<1	<1.0	140	127	<100	.470	220	E.2	340	1	<100	.43
27...	E.2	<1	<1.0	150	104	<100	.470	210	.3	250	2	<100	.38
SEP 17...	E.2	<.500000	<1.0	160	82.2	<50	.460	260	.5	480	3	<50	.29

DATE	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON SED. SUSP. PERCENT (30244)	CARBON, ORGANIC SUS- PENDEDED, TOTAL PERCENT (50465)	NITRO- GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	SEDI- MENT SUSP., FLOW- THROUGH CENTRIF (MG/L) (50279)	SEDI- MENT, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
MAR 29...	1.9	<.1	<.1	<.1	--	--	<.022	--	<1	--	--
JUN 30...	11	<.1	.9	.9	4.1	--	.060	21	24	1330	94
JUL 16...	13	<.1	.6	.6	4.2	--	.022	21	25	1630	95
AUG 07...	6.0	<.1	1.0	1.0	--	--	.133	11	12	541	97
27...	6.8	<.1	.6	.6	--	--	.052	14	15	761	94
SEP 17...	12	<.1	1.2	1.2	5.0	4.7	.060	18	26	1330	97

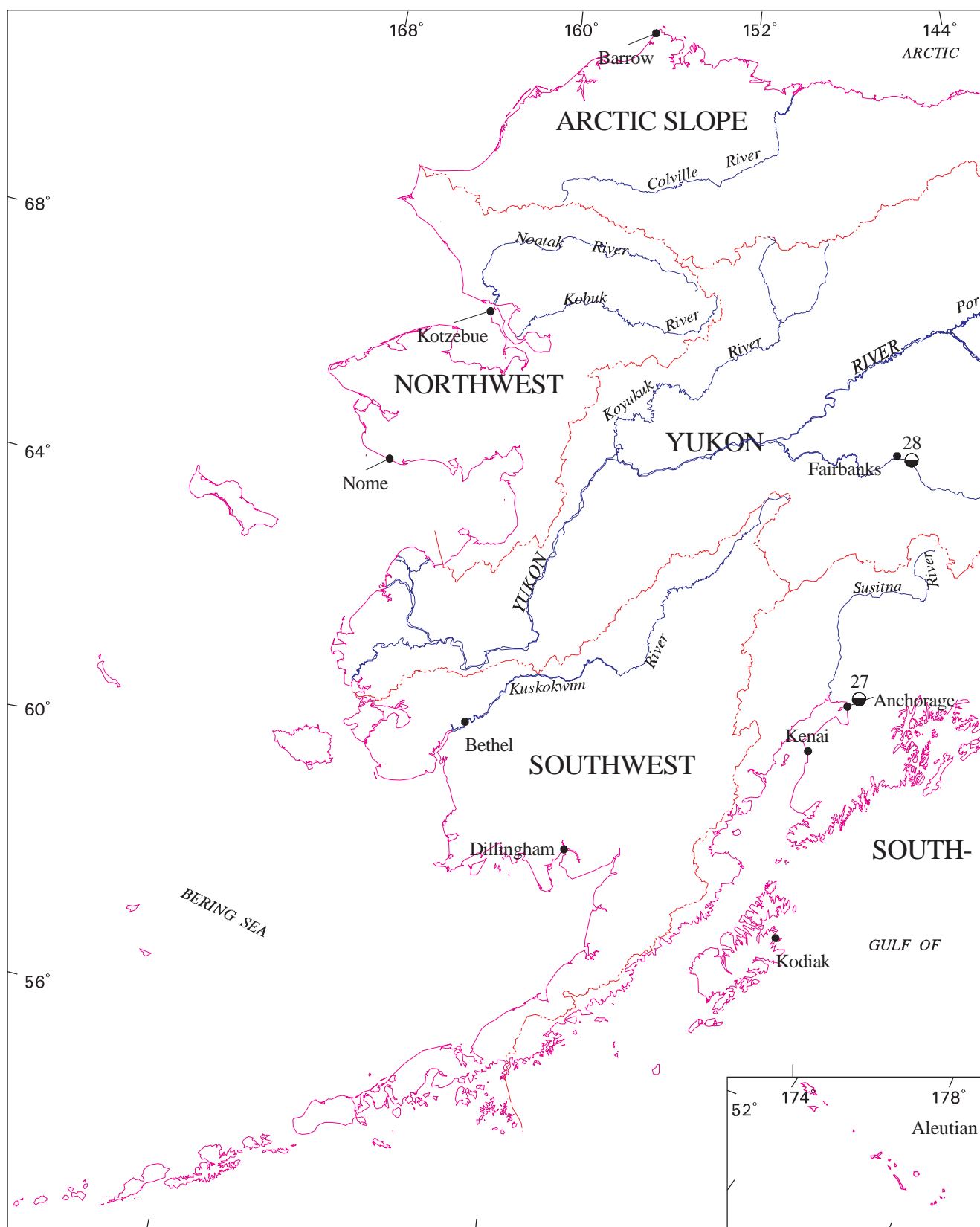
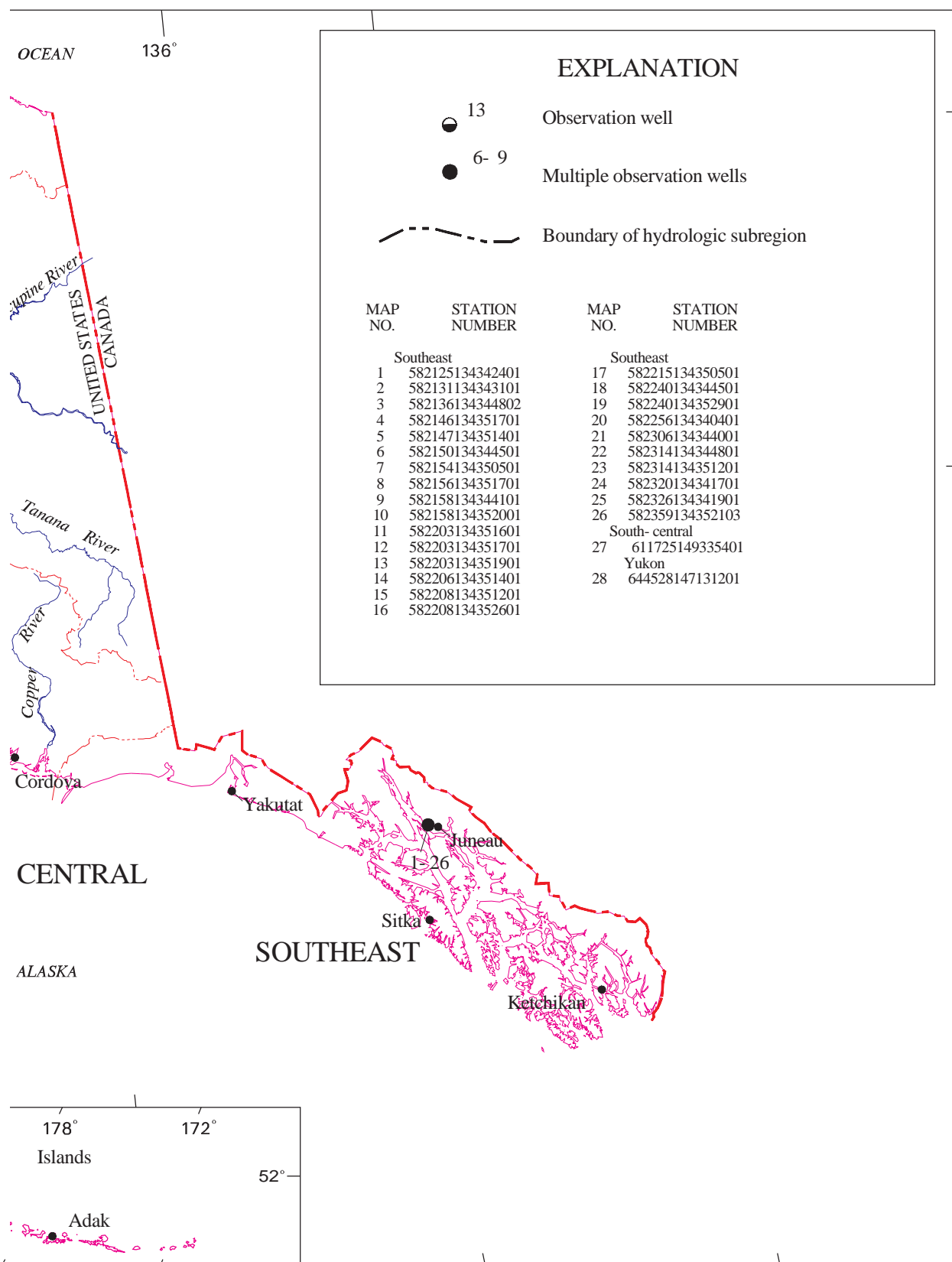
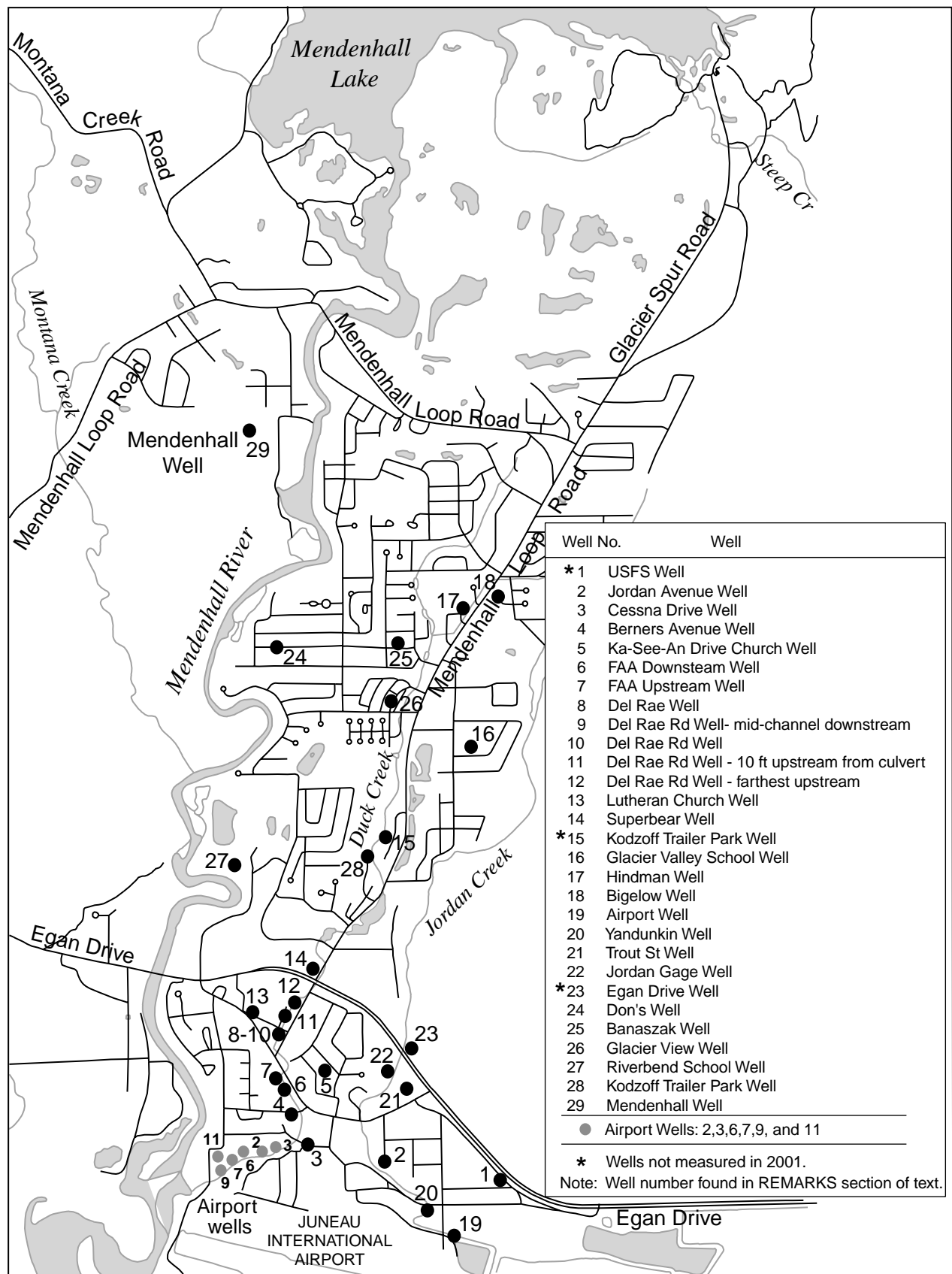


Figure 3. Locations of ground-water observation wells.





Location of Mendenhall Valley wells.

SOUTHEAST ALASKA

JUNEAU

582125134342401. Local number, CD04006631DBAD1022.

LOCATION.--Lat 58°21'25", long 134°34'24", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 31, T. 40 S., R. 66 E. (Juneau B-2 SW quad), Hydrologic Unit 19010301. Well is located on Juneau International Airport property in Jordan Creek streambed, about 50 ft downstream from culvert under Crest Street, and 300 ft south of intersection of Crest Street and Yandukin Drive, Juneau. Owner: Juneau International Airport.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 1.25 in., depth 3.06 ft, screened 0.06 to 3.06 ft, well point driven into streambed.

INSTRUMENTATION.--Intermittent measurement with chalked steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land-surface datum is 12.32 ft above sea level (determined by levels survey). Measuring point: top of steel casing 3.94 ft above land-surface datum.

REMARKS.--Observation well installed by U.S. Geological Survey, designated as Duck Creek #19 (Airport Well). Well is in a stream channel and is intermittently flooded.

PERIOD OF RECORD.--June 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.83 ft above land-surface datum, April 10, 2001; lowest measured, 1.63 ft above land-surface datum, June 29, 1999.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO
SEPTEMBER 2001

DATE	WATER LEVEL
APR 10	-1.83

Minus sign indicates that the water level was above land-surface datum.

582131134343101. Local number, CD04006631ACDC2002.

LOCATION.--Lat 58°21'31", long 134°34'31", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 31, T. 40 S., R 66 E. (Juneau B-2 SW quad), Hydrologic Unit 19010301. Well is located in Jordan Creek stream channel, 30 ft upstream from culvert under Yandukin Drive, and 300 ft west of the intersection of Yandukin Drive and Crest Street, Juneau. Owner: City and Borough of Juneau.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 1.25 in., depth 3.15 ft, screened 0.15 to 3.15 ft, well point driven into streambed.

INSTRUMENTATION.--Intermittent measurement with chalked steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land-surface datum is 15.72 ft above sea level (determined by levels survey). Measuring point: top of steel casing 3.85 ft above land-surface datum.

REMARKS.--Observation well installed by U.S. Geological Survey, designated as Duck Creek #20 (Yandukin Well). Well is in a stream channel and is intermittently flooded.

PERIOD OF RECORD.--June 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.37 ft above land-surface datum, June 29, 1999; lowest measured, 0.35 ft below land-surface datum, March 14, 2000.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO
SEPTEMBER 2001

DATE	WATER LEVEL
APR 10	-1.35

Minus sign indicates that the water level was above land-surface datum.

SOUTHEAST ALASKA

JUNEAU--CONTINUED

582136134344802. Local number, CD04006631ACBC1015.

LOCATION.--Lat 58°21'36", long 134°34'48", in NW¹/₄ SW¹/₄ NE¹/₄ sec. 31, T. 40 S., R. 66 E. (Juneau B-2 SW quad), Hydrologic Unit 19010301. Well is located about 20 ft southeast of a trail running between the intersection of Jordan Avenue and Teal Street, about 50 ft south of Teal Street, and about 20 ft northeast of a footbridge over Jordan Creek, Juneau. Owner: City and Borough of Juneau.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 1.25 in., depth 8 ft, screened 6 to 8 ft.

INSTRUMENTATION.--Intermittent measurements with chalked steel tape by U.S. Geological, University of Alaska-Southeast, or U.S. Forest Service personnel.

DATUM.--Elevation of land-surface datum is 19.84 ft above sea level (determined by levels survey). Measuring point: top of steel casing, 0.6 ft above land-surface datum.

REMARKS.--Observation well drilled by U.S. Geological Survey, designated as Duck Creek #2 (Jordan Avenue Well). Area near well is intermittently flooded.

PERIOD OF RECORD.--May 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.1 ft above land-surface datum, July 13, 1997; lowest measured, 3.28 ft below land-surface datum, March 12, 1998.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO
SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	1.05	APR 12	2.50
NOV 4	1.22	APR 24	2.79
APR 10	2.47	AUG 15	2.41

582146134351701. Local number, CD04006631BBDD1016.

LOCATION.--Lat 58°21'46", long 134°35'17", in SE¹/₄ NW¹/₄ NW¹/₄ sec. 31, T. 40 S., R. 66 E. (Juneau B-2 SW quad), Hydrologic Unit 19010301. Well is located near the left bank of Duck Creek, about 10 ft northwest of the intersection of Cessna Drive and Alex Holden Way, Juneau. Owner: City and Borough of Juneau.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 2 in., depth 12 ft, screened 10 to 12 ft.

INSTRUMENTATION.--Intermittent measurements with chalked steel tape by U.S. Geological Survey, University of Alaska-Southeast, or U.S. Forest Service personnel.

DATUM.--Elevation of land-surface datum is 25.35 ft above sea level (determined by levels survey). Measuring point: top of casing 0.88 ft above land-surface datum.

REMARKS.--Observation well drilled by U.S. Geological Survey, designated as Duck Creek #3 (Cessna Drive Well).

PERIOD OF RECORD.--June 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.9 ft below land-surface datum, July 13, 1997; lowest measured, 10.06 ft below land-surface datum, March 21, 2000.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO
SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	8.14	APR 12	9.33
NOV 4	8.24	24	9.86
APR 10	9.27	AUG 15	8.94

SOUTHEAST ALASKA

JUNEAU--CONTINUED

582147134351401. Local number, CD04006631BBDB1017.

LOCATION.--Lat 58°21'47", long 134°35'14", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 31, T. 40 S., R. 66 E. (Juneau B-2 SW quad), Hydrologic Unit 19010301. Well is located near the right bank of Duck Creek, about 70 ft downstream of the Berners Avenue crossing, Juneau. Owner: City and Borough of Juneau.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 2 in., depth 8.8 ft, screened 6.8 to 8.8 ft.

INSTRUMENTATION.--Intermittent measurements with chalked steel tape by U.S. Geological Survey, University of Alaska-Southeast or U.S. Forest Service personnel.

DATUM.--Elevation of land-surface datum is 19.52 ft above sea level (determined by levels survey). Measuring point: Top of PVC pipe casing 1.9 ft above land-surface datum.

REMARKS.--Observation well drilled by U.S. Geological Survey, designated as Duck Creek #4 (Berners Avenue Well). Water from well was sampled for water quality on September 5, 1997, January 29, 1998, and September 3, 1998.

PERIOD OF RECORD.--June 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.20 ft below land-surface datum, September 3, 1998; lowest measured, 4.12 ft below land-surface datum, March 21, 2000.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO
SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	1.60	APR 12	3.41
NOV 4	1.80	APR 24	3.92
APR 10	3.25	AUG 14	2.75

582150134344501. Local number, CD04006631BAAD1021.

LOCATION.--Lat 58°21'50", long 134°34'45", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 31, T. 40 S., R. 66 E. (Juneau B-2 SW quad), Hydrologic Unit 19010301. Well is located in Jordan Creek channel, near right bank, 10 ft upstream from footbridge, about 200 ft downstream from Trout Street bridge, Juneau. Owner: City and Borough of Juneau.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 1.25 in., depth 6 ft, screened 3 to 6 ft.

INSTRUMENTATION.--Intermittent measurements with chalked steel tape by U.S. Geological Survey or University of Alaska-Southeast personnel.

DATUM.--Elevation of land-surface datum is 23.65 ft above sea level (determined by levels survey). Measuring point: Top of steel pipe casing 1.00 ft above land-surface datum.

REMARKS.--Observation well drilled by U.S. Geological Survey, designated as Duck Creek #21 (Trout Street Well).

PERIOD OF RECORD.--March 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.-- Highest water level measured, 4.61 ft below land-surface datum, April 12, 2001; lowest measured, dry, March 14, 2000.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO
SEPTEMBER 2001

DATE	WATER LEVEL
APR 12	4.61

SOUTHEAST ALASKA

JUNEAU--CONTINUED

582154134350501. Local number, CD04006630CDCB1027.

LOCATION.--Lat 58°21'54", long 134°35'05", in SW¹/₄ SE¹/₄ SW¹/₄ sec. 30, T. 40 S., R. 66 E. (Juneau B-2 SW quad), Hydrologic Unit 19010301. Well is about 15 ft east of a tributary to Duck Creek and about 1,200 ft northwest of Jordan Creek, 90 ft southwest of the First Church of God on Ka-See-An Drive, Juneau. Owner: First Church of God.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 1.25 in., depth 17.5 ft, screened 15.5 to 17.5 ft using a sandpoint.

INSTRUMENTATION.--Intermittent measurements with chalked steel tape by U.S. Geological Survey, University of Alaska-Southeast, or U.S. Forest Service personnel.

DATUM.--Elevation of land-surface datum is 26.30 ft above sea level (determined by levels survey). Measuring point: top of casing 2.05 ft above land-surface datum.

REMARKS.--Observation well drilled by U.S. Geological Survey, designated as Duck Creek #5 (Ka-See-An Drive Church Well). PERIOD OF RECORD.--June 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.41 ft below land-surface datum, October 23, 1999; lowest measured, 9.62 ft below land-surface datum, March 12, 1998.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO
SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	6.06	APR 12	8.67
NOV 4	6.31	APR 24	9.45
APR 10	8.60	AUG 15	8.05

582156134351701. Local number, CD04006631BBBA1018.

LOCATION.--Lat 58°21'56", long 134°35'17", in NW¹/₄ NW¹/₄ NW¹/₄ sec. 31, T. 40 S., R. 66 E. (Juneau B-2 SW quad), Hydrologic Unit 19010301. Well is located in Duck Creek channel about 90 ft downstream from driveway crossing to Federal Aviation Administration building, about 50 ft southwest of Old Glacier Highway, Juneau. Owner: Federal Aviation Administration.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 1.25 in., depth 11 ft, screened 9 to 11 ft.

INSTRUMENTATION.--Intermittent measurements with chalked steel tape by U.S. Geological Survey, University of Alaska-Southeast or U.S. Forest Service personnel.

DATUM.--Elevation of land-surface datum is 18.48 ft above sea level (determined by levels survey). Measuring point: top of casing 1.86 ft above land-surface datum.

REMARKS.--Observation well drilled by U.S. Geological Survey, designated as Duck Creek #6 (FAA Downstream Well). Well is in stream channel and is intermittently flooded.

PERIOD OF RECORD.--May 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, unknown, stream stage was higher than top of well casing during numerous periods since May 1997; lowest measured, 3.62 ft below land-surface datum, March 13, 1998.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO
SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	X	APR 12	2.55
NOV 4	X	APR 24	3.37
APR 10	2.54		

X surface-water affected, stream stage was higher than top of well casing

SOUTHEAST ALASKA

JUNEAU--CONTINUED

582158134344101. Local number, CD04006630DCCC1034.

LOCATION.--Lat 58°21'58", long 134°34'41", in SW¹/₄ SW¹/₄ SE¹/₄ sec. 30, T. 40 S., R. 66 E. (Juneau B-2 SW quad), Hydrologic Unit 19010301. Well is located in Jordan Creek channel about 3 ft downstream from downstream footbridge crossing about 50 ft downstream of Egan Expressway, Juneau. Owner: City and Borough of Juneau.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 1.25 in., depth 5.4 ft, screened 2.4 to 5.4 ft.

INSTRUMENTATION.--Intermittent measurements with chalked steel tape by U.S. Geological Survey or University of Alaska-Southeast personnel.

DATUM.--Elevation of land-surface datum is 23.78 ft above sea level (determined by levels survey). Measuring point: top of casing 1.60 ft above land-surface datum.

REMARKS.--Observation well drilled by U.S. Geological Survey, designated as Duck Creek #22. Well is in stream channel and is intermittently flooded.

PERIOD OF RECORD.--August 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, unknown, stream stage was higher than top of well casing during numerous periods since August 1999; lowest measured, dry, March 14, 2000.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR AUGUST 1999 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL
*DEC 30, 1999	1.13	APR 10, 2001	3.50
* MAR 14, 2000	D	APR 12, 2001	3.58

* Not previously published.

D Dry

582158134352001. Local number, CD04006630CCCD2017.

LOCATION.--Lat 58°21'58", long 134°35'20", in SW¹/₄ SW¹/₄ SW¹/₄ sec. 30, T. 40 S., R. 66 E. (Juneau B-2 SW quad), Hydrologic Unit 19010301. Well is located in Duck Creek channel, 20 ft upstream from driveway crossing to Federal Aviation Administration building, about 50 ft southwest of Old Glacier Highway, Juneau. Owner: Federal Aviation Administration.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 1.25 in., depth 12 ft, screened 10 to 12 ft.

INSTRUMENTATION.--Intermittent measurements with chalked steel tape by U.S. Geological Survey, University of Alaska-Southeast, or U.S. Forest Service personnel.

DATUM.--Elevation of land-surface datum is 19.62 ft above sea level (determined by levels survey). Measuring point: top of steel casing 1.2 ft above land-surface datum.

REMARKS.--Observation well drilled by U.S. Geological Survey, designated as Duck Creek #7 (FAA Upstream Well). Well is in stream channel and is intermittently flooded.

PERIOD OF RECORD.--May 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, unknown, stream stage was higher than top of well casing during many periods since 1997; lowest measured, 3.63 ft below land-surface datum, July 2, 1998.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	X	APR 12	1.81
NOV 4	X	APR 24	2.94
APR 10	1.62		

X surface-water affected, stream stage was higher than top of well casing

GROUND-WATER LEVEL DATA

SOUTHEAST ALASKA

JUNEAU--CONTINUED

582203134351601. Local number, CD04006630CCDB1028.

LOCATION.--Lat 58°22'03", long 134°35'16", in SE¹/₄ SW¹/₄ SW¹/₄ sec. 30, T. 40 S., R. 66 E. (Juneau B-2 quad), Hydrologic Unit 19010301. Well is located on left bank of Duck Creek about 55 ft downstream from Del Rae Road crossing, 25 ft from Mendenhall Loop Road, and 0.25 mi. south of the intersection of Mendenhall Loop Road and Egan Drive, Juneau. Owner: City and Borough of Juneau.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 1.5 in., depth 14 ft, screened 12 to 14 ft.

INSTRUMENTATION.--Intermittent measurement with chalked steel tape by U.S. Geological Survey, University of Alaska-Southeast or U.S. Forest Service personnel.

DATUM.--Elevation of land-surface datum is 23.10 ft above sea level (determined by levels survey). Measuring point: top of steel casing 1.56 ft above land-surface datum.

REMARKS.--Observation well drilled by U.S. Geological Survey, designated as Duck Creek #10 (Del Rae Road Well).

PERIOD OF RECORD.--May 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, unknown, stream stage was above top of well casing on December 26, 1999; lowest measured, 7.59 ft below land-surface datum, March 12, 1998.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO
SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	1.93	APR 10	5.90
NOV 4	2.15		

582203134351701. Local number, CD04006630CCBD3015.

LOCATION.--Lat 58°22'03", long 134°35'17", in NW¹/₄ SW¹/₄ SW¹/₄ sec. 30, T. 40 S., R. 66 E. (Juneau B-2 SW quad), Hydrologic Unit 19010301. Well is located on left bank of Duck Creek, 30 ft downstream from Del Rae Road crossing, and 0.25 mi. south of the intersection of Mendenhall Loop Road and Egan Drive, Juneau. Owner: City and Borough of Juneau.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 1.5 in., depth 11 ft, slotted 9 to 11 ft.

INSTRUMENTATION.--Intermittent measurements with chalked steel tape by U.S. Geological Survey, University of Alaska-Southeast or U.S. Forest Service personnel.

DATUM.--Elevation of land-surface datum is 22.14 ft above sea level (determined by levels survey). Measuring point: Top of PVC casing 1.3 ft above land-surface datum.

REMARKS.--Observation well drilled by U.S. Geological Survey, designated as Duck Creek #9 (Del Rae Road Well, mid-channel downstream). Well is near stream channel and is intermittently flooded.

PERIOD OF RECORD.--May 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, unknown, stream stage was higher than top of well during many periods since May 1997; lowest measured, 8.39 ft below land-surface datum, May 6, 1997.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO
SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	0.64	APR 24	7.57
APR 10	5.14	AUG 17	4.61
APR 12	5.34		

SOUTHEAST ALASKA

JUNEAU--CONTINUED

582203134351901. Local number, CD04006630CCBD2015.

LOCATION.--Lat 58°22'03", long 134°35'19", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 30, T. 40 S., R. 66 E. (Juneau B-2 SW quad), Hydrologic Unit 19010301. Well is located on right bank of Duck Creek, 75 ft downstream from Del Rae Road crossing and 0.25 mi. south of the intersection of Mendenhall Loop Road and Egan Drive, Juneau. Owner: City and Borough of Juneau.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 2 in., depth 15 ft, screened 12 to 15 ft.

INSTRUMENTATION.--Intermittent measurements with chalked steel tape by U.S. Geological Survey, University of Alaska-Southeast, or U.S. Forest Service personnel.

DATUM.--Elevation of land-surface datum is 33 ft above sea level (determined from topographic map). Measuring point: top of casing 1.66 ft above land-surface datum.

REMARKS.--Observation well drilled by U.S. Geological Survey, designated as Duck Creek #8 (Del Rae Well). Well is near stream channel and is intermittently flooded.

PERIOD OF RECORD.--May 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, unknown, stream stage was higher than top of well casing during numerous periods since 1997; lowest measured, 9.09 ft below land-surface datum, March 21, 2000.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO
SEPTEMBER 2001

DATE	WATER LEVEL
APR 10	7.42
APR 12	7.51

582206134351401. Local number, CD04006630CCAC1029.

LOCATION.--Lat 58°22'06", long 134°35'14", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 30, T. 40 S., R. 66 E. (Juneau B-2 SW quad), Hydrologic Unit 19010301. Well is located in Duck Creek stream channel, 12 ft upstream from Del Rae Road crossing, 900 ft southwest of intersection of Mendenhall Loop Road and Egan Drive, Juneau. Owner: City and Borough of Juneau.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 1.5 in., depth 12 ft, slotted 10 to 12 ft. Unknown debris placed inside well casing at about 3.6 ft below land surface sometime prior to March 12, 1998. Water levels cannot be determined below the obstruction, but water levels above the obstruction appear to be representative of aquifer conditions.

INSTRUMENTATION.--Intermittent measurement with chalked steel tape by U.S. Geological Survey, University of Alaska-Southeast or U.S. Forest Service personnel.

DATUM.--Elevation of land-surface datum is 21.25 ft above sea level (determined by levels survey). Measuring point: Top of PVC casing 1.8 ft above land-surface datum.

REMARKS.--Observation well drilled by U.S. Geological Survey, designated as Duck Creek #11 (Del Rae Road Well, 10 ft upstream from culvert). Well is in stream channel and is intermittently flooded.

PERIOD OF RECORD.--May 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.4 ft above land-surface datum (surface-water affected, stream stage was higher than top of well casing), July 13, 1997; lowest measured, 5.45 ft below land-surface datum, March 12, 1998.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO
SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	-0.43	APR 24	D
APR 10	D		
APR 12	O		

Minus sign indicates that the water level was above land-surface datum.

D Dry.

O Obstruction.

SOUTHEAST ALASKA

JUNEAU--CONTINUED

582208134351201. Local number, CD04006630CCAB1030.

LOCATION.--Lat 58°22'08", long 134°35'12", in NE¹/₄ SW¹/₄ SW¹/₄ sec. 30, T. 40 S., R. 66 E. (Juneau B-2 SW quad), Hydrologic Unit 19010301. Well is located mid-channel of Duck Creek, about 130 ft upstream from Del Rae Road crossing, and 700 ft southwest of the intersection of Mendenhall Loop Road and Egan Drive, Juneau. Owner: City and Borough of Juneau.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 1.5 in., depth 11 ft, slotted 7 to 10 ft.

INSTRUMENTATION.-- Measurement with chalked steel tape by U.S. Geological Survey, University of Alaska-Southeast, or U.S. Forest Service personnel.

DATUM.--Elevation of land-surface datum is 21.22 ft above sea level (determined by levels survey). Measuring point: top of PVC casing 2.14 ft above land-surface datum.

REMARKS.--Observation well drilled by U.S. Geological Survey, designated as Duck Creek #12 (Del Rae Road Well, farthest upstream). Well is in stream channel and is intermittently flooded.

PERIOD OF RECORD.--May 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, unknown, stream stage was above top of well casing during many periods since 1997; lowest measured, 5.46 ft below land-surface datum, March 21, 2000.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO
SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	-0.61	APR 12	3.66
APR 10	3.26	APR 24	5.17

Minus sign indicates that the water level was above land-surface datum.

582208134352601. Local number, CD04006630CCBB1031.

LOCATION.--Lat 58°22'08", long 134°35'26", in NW¹/₄ SW¹/₄ SW¹/₄ sec. 30, T. 40 S., R. 66 E. (Juneau B-2 SW quad), Hydrologic Unit 19010301. Well is located near a church parking lot, 55 ft northeast of Del Rae Road, and 105 ft southeast of the Lutheran Church, Juneau. Owner: Lutheran Church.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 1.25 in., depth 15 ft, screened 13 to 15 ft, casing has filled in with sediment to about 12.2 ft.

INSTRUMENTATION.--Intermittent measurement with chalked steel tape by U.S. Geological Survey, University of Alaska-Southeast, or U.S. Forest Service personnel.

DATUM.--Elevation of land-surface datum is 26.74 ft above sea level (determined by levels survey). Measuring point: top of steel coupling at top of casing 2.8 ft above land-surface datum.

REMARKS.--Observation well drilled by U.S. Geological Survey, designated as Duck Creek #13 (Lutheran Church Well).

PERIOD OF RECORD.--June 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.58 ft below land-surface datum, October 23, 1999; lowest measured, dry, March 21 and April 8, 2000.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO
SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	8.02	APR 24	12.19
NOV 4	8.67	AUG 17	10.04

SOUTHEAST ALASKA

JUNEAU--CONTINUED

582215134350501. Local number, CD04006630CBAD1032.

LOCATION.--Lat 58°22'15", long 134°35'05", in NE¹/₄ NW¹/₄ SW¹/₄ sec. 30, T. 40 S., R. 66 E. (Juneau B-2 SW quad), Hydrologic Unit 19010301. Well is near right bank of Duck Creek, 20 ft upstream from a footbridge and 225 ft upstream from the intersection of Egan Drive and Mendenhall Loop Road, Juneau. Owner: City and Borough of Juneau.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 1.25 in., depth 12 ft, screened 10 to 12 ft.

INSTRUMENTATION.--Intermittent measurements by U.S. Forest Service, U.S. Geological Survey or University of Alaska-Southeast personnel.

DATUM.--Elevation of land-surface datum is 25.04 ft above sea level (determined by levels survey). Measuring point: top of casing 0.70 ft above land-surface datum.

REMARKS.--Observation well drilled by U.S. Geological Survey, designated as Duck Creek #14 (Superbear Well).

PERIOD OF RECORD.--May 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 1.17 ft below land-surface datum, October 9, 1999; lowest measured, 3.80 ft below land-surface datum, March 21, 2000.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO
SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	1.39	APR 12	2.52
NOV 4	1.47	APR 24	2.82
APR 10	2.49	AUG 17	1.90

GROUND-WATER LEVEL DATA

SOUTHEAST ALASKA

JUNEAU--CONTINUED

582240134344501. Local number, CD04006630BADA2033.

LOCATION.--Lat 58°22'40", long 134°34'45", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 30, T. 40 S., R. 66 E. (Juneau B-2 NW quad) Hydrologic Unit 19010301, about 270 ft up a trail from the northern end of the road through Kodzoff #1 trailer Park, Juneau. Owner: Goldbelt Corporation

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 2.0 in., depth 18.51 ft.

INSTRUMENTATION.-- Electronic data logger and submersible pressure transducer February 2001 to current year.

DATUM.--Elevation of land-surface datum is 40.57 ft above sea level (determined by levels survey). Measuring point: Top of casing 1.70 ft above land-surface datum.

REMARKS.--Record good. Well also known as Kodzoff Trailer Park Well.

PERIOD OF RECORD.--February 2001 to current year.

EXTREMES FOR CURRENT YEAR.--Highest water level recorded during period February 2001 to September 2001, 8.72 ft below land-surface datum, September 16 and 17, lowest recorded, 10.94 ft below land-surface datum, April 26.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO
SEPTEMBER 2001
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	9.28	9.52	10.17	10.49	9.62	10.12	9.18	9.29
2	---	---	---	---	9.31	9.59	10.23	10.41	9.64	10.16	9.24	9.19
3	---	---	---	---	9.39	9.71	10.29	10.08	9.55	10.20	9.32	9.19
4	---	---	---	---	9.42	9.81	10.18	9.87	9.52	10.12	9.32	9.19
5	---	---	---	---	9.48	9.89	10.16	9.82	9.52	9.87	9.35	9.08
6	---	---	---	---	9.56	9.83	10.16	9.80	9.53	9.65	9.39	8.99
7	---	---	---	---	9.60	9.78	10.17	9.78	9.58	9.48	9.48	8.94
8	---	---	---	---	9.64	9.77	10.16	9.68	9.62	9.32	9.55	8.92
9	---	---	---	---	9.70	9.62	10.12	9.49	9.65	9.26	9.61	8.93
10	---	---	---	---	9.75	9.33	10.12	9.46	9.69	9.25	9.67	9.05
11	---	---	---	---	9.83	9.12	10.15	9.47	9.69	9.26	9.74	9.17
12	---	---	---	---	9.89	9.08	10.17	9.51	9.75	9.31	9.83	9.28
13	---	---	---	---	9.58	9.10	10.22	9.55	9.78	9.28	9.92	8.96
14	---	---	---	---	9.58	9.20	10.28	9.58	9.79	9.27	10.01	8.84
15	---	---	---	---	9.65	9.28	10.35	9.64	9.82	9.27	10.05	8.82
16	---	---	---	---	9.81	9.34	10.44	9.71	9.82	9.30	10.09	8.72
17	---	---	---	---	9.93	9.35	10.50	9.77	9.85	9.39	10.13	8.72
18	---	---	---	---	10.03	9.42	10.60	9.81	9.88	9.54	10.04	8.73
19	---	---	---	---	10.15	9.49	10.64	9.84	9.91	9.63	9.77	8.82
20	---	---	---	---	10.22	9.59	10.73	9.91	9.93	9.70	9.71	8.73
21	---	---	---	---	10.29	9.70	10.80	9.84	9.93	9.74	9.70	8.76
22	---	---	---	---	10.37	9.77	10.85	9.74	9.81	8.92	9.73	8.90
23	---	---	---	---	10.44	9.85	10.89	9.59	9.75	8.86	9.78	8.94
24	---	---	---	---	10.52	9.90	10.90	9.57	9.73	8.88	9.89	8.95
25	---	---	---	---	10.62	9.95	10.87	9.56	9.79	8.85	10.00	9.02
26	---	---	---	---	10.27	10.01	10.90	9.59	9.90	8.85	10.05	9.11
27	---	---	---	---	9.46	10.03	10.75	9.62	9.99	8.88	9.55	9.21
28	---	---	---	---	9.44	10.07	10.54	9.66	10.04	8.97	9.47	9.31
29	---	---	---	---	---	10.07	10.48	9.69	10.06	9.07	9.36	9.38
30	---	---	---	---	---	10.11	10.47	9.66	10.09	9.12	9.31	9.26
31	---	---	---	---	---	10.13	---	9.63	---	9.15	9.29	---

SOUTHEAST ALASKA

JUNEAU--CONTINUED

582240134352901. Local number, CD04006630BBCB1036.

LOCATION.--Lat 58°22'40", long 134°35'29", in SW¹/₄ NW¹/₄ NW¹/₄ sec. 30, T. 40 S., R. 66 E. (Juneau B-2 NW quad), Hydrologic Unit 19010301, City and Borough of Juneau, at northeast edge of baseball field for Riverbend School on Riverside Drive, Juneau. Owner: City and Borough of Juneau.

AQUIFRER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.-- Diameter 2.0 in., depth 15.9 ft, slotted 5 to 15 ft.

INSTRUMENTATION.-- Intermittent measurements with chalked steel tape by U.S. Geological Survey April 2001 to May 2001. Electronic data logger and submersible pressure transducer May 2001 to current year.

DATUM.-- Elevation of land-surface datum is 31.95 ft above sea level (determined by survey grade GPS). Measuring point: Top of casing 0.20 ft below land-surface datum.

REMARKS.-- Records good except for the period August 31 to September 30, which is poor. Well is also known as Riverbend School well.

PERIOD OF RECORD.-- April 2001 to current year.

EXTREMES FOR THE CURRENT YEAR.--Highest water level recorded during period April 2001 to September 2001, 4.44 ft below land-surface datum, September 21; lowest recorded, 7.83 ft below land-surface datum, May 24.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO
SEPTEMBER 2001
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	7.17	7.16	5.36	5.43
2	---	---	---	---	---	---	---	---	7.21	7.24	5.38	5.40
3	---	---	---	---	---	---	---	---	7.33	7.05	5.37	5.40
4	---	---	---	---	---	---	---	---	7.12	7.04	5.37	5.88
5	---	---	---	---	---	---	---	---	7.13	7.02	5.50	5.61
6	---	---	---	---	---	---	---	---	7.23	6.92	5.55	5.60
7	---	---	---	---	---	---	---	---	7.28	6.91	5.91	5.37
8	---	---	---	---	---	---	---	---	6.99	7.18	6.01	5.41
9	---	---	---	---	---	---	---	---	7.00	7.17	5.89	5.13
10	---	---	---	---	---	---	---	---	7.12	7.08	5.88	4.97
11	---	---	---	---	---	---	---	---	7.29	7.02	5.98	4.90
12	---	---	---	---	---	---	---	---	7.33	6.86	6.06	4.90
13	---	---	---	---	---	---	---	---	7.29	6.85	6.17	5.05
14	---	---	---	---	---	---	---	---	7.30	6.70	6.32	4.77
15	---	---	---	---	---	---	---	---	7.40	6.43	6.29	4.88
16	---	---	---	---	---	---	---	---	7.49	6.32	6.29	4.79
17	---	---	---	---	---	---	#6.97	---	7.50	6.35	6.37	4.55
18	---	---	---	---	---	---	---	---	7.37	6.51	6.49	4.47
19	---	---	---	---	---	---	---	---	7.22	6.48	6.50	4.49
20	---	---	---	---	---	---	---	---	7.17	6.45	5.90	4.53
21	---	---	---	---	---	---	---	---	7.30	6.44	5.91	4.44
22	---	---	---	---	---	---	---	7.55	7.31	6.47	6.21	4.51
23	---	---	---	---	---	---	---	7.63	7.15	6.62	6.36	4.59
24	---	---	---	---	---	---	---	7.80	7.16	6.61	6.42	4.45
25	---	---	---	---	---	---	---	7.56	7.19	6.53	6.36	4.62
26	---	---	---	---	---	---	---	7.12	7.11	6.12	6.38	4.62
27	---	---	---	---	---	---	---	7.07	6.94	5.91	6.39	4.70
28	---	---	---	---	---	---	---	7.06	6.98	5.81	6.60	4.77
29	---	---	---	---	---	---	---	7.26	7.39	5.77	6.43	4.70
30	---	---	---	---	---	---	---	7.47	7.18	5.60	6.05	5.03
31	---	---	---	---	---	---	---	7.32	---	5.46	5.53	---

Result of tapedown

SOUTHEAST ALASKA

JUNEAU--CONTINUED

582256134340401. Local number, CD04006619DDBD1054.

LOCATION.--Lat 58°22'56", long 134°34'04", in NW¹/₄ SE¹/₄ SE¹/₄ sec. 19, T. 40 S., R. 66 E. (Juneau B-2 NW quad), Hydrologic Unit 19010301. Well is located at Glacier Valley School, at southwest corner of baseball field, 33 ft north of Evergreen Parkway, 120 ft southeast of a covered basketball court, and 460 ft east of Tongass Boulevard, Juneau. Owner: Glacier Valley School.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 2 in., depth 11.2 ft, screened 6.9 ft to 11.2 ft, casing has filled in with sediment to about 9.4 ft.

INSTRUMENTATION.--Intermittent measurements with chalked steel tape by U.S. Geological Survey or University of Alaska-Southeast personnel.

DATUM.--Elevation of land-surface datum is 39.33 ft above sea level (determined by levels survey). Measuring point: top of casing 1.8 ft above land-surface datum.

REMARKS.--Observation well drilled by U.S. Geological Survey, designated as Duck Creek #16 (Glacier Valley School Well).

PERIOD OF RECORD.--July 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.00 ft below land-surface datum, December 26, 1999; lowest measured, dry, March 21, 2000 and August 14, 2001.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO
SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	3.58	APR 17	4.70
NOV 4	3.44	APR 24	3.94
APR 10	4.25	MAY 22	3.78
APR 12	4.27	AUG 14	D

D Dry

SOUTHEAST ALASKA

JUNEAU--CONTINUED

582306134344001. Local number, CD04006619DBCB1056.

LOCATION.--Lat 58°23'06", long 134°34'40", in SW¹/₄ NW¹/₄ SE¹/₄ sec. 19, T.40 S., R. 66 E. (Juneau B-2 NW quad), Hydrologic Unit 19010301, Well is the northernmost of two wells (southernmost has casing welded shut), located about 300 ft west of Duck Creek, about 300 ft north of Stephen Richards Drive, Juneau. Owner: Glacier View Trailer Park.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 2.0 in., depth 52.7 ft.

INSTRUMENTATION.--Intermittent measurement with chalked steel tape by U.S. Geological Survey April 2000 to April 2001. Electronic data logger and submersible pressure transducer April 2001 to current year.

DATUM.--Elevation of land-surface datum is 45.4 ft above sea level (determined by survey-grade GPS). Measuring point: Top of casing 1.4 ft above land-surface datum.

REMARKS.--Record good. Well also known as Glacier View Well.

PERIOD OF RECORD.--April 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.78 ft below land-surface datum, July 22, 2001; lowest 9.07 ft below land-surface datum, April 26, 2001.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO
SEPTEMBER 2001
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	#7.49	---	---	8.83	7.95	8.23	7.30	7.45
2	---	---	---	---	---	---	---	8.68	7.97	8.26	7.43	7.35
3	---	---	---	---	---	---	---	8.31	7.85	8.30	7.52	7.35
4	---	---	---	---	---	---	---	8.05	7.82	8.28	7.55	7.43
5	---	---	---	---	---	---	---	8.03	7.81	8.08	7.58	7.17
6	---	---	---	---	---	---	---	8.04	7.86	7.88	7.63	7.03
7	---	---	---	---	---	---	---	8.03	7.95	7.73	7.77	6.97
8	---	---	---	---	---	---	---	7.97	7.97	7.56	7.85	6.95
9	---	---	---	---	---	---	---	7.66	7.99	7.54	7.89	6.95
10	---	---	---	---	---	---	---	7.65	8.03	7.52	7.94	7.21
11	---	---	---	---	---	---	---	7.72	8.05	7.56	8.01	7.41
12	---	---	---	---	---	---	---	7.80	8.11	7.67	8.09	7.54
13	---	---	---	---	---	---	---	7.88	8.12	7.64	8.13	7.01
14	---	---	---	---	---	---	---	7.90	8.13	7.61	8.11	6.73
15	---	---	---	---	---	---	---	7.99	8.17	7.61	8.09	6.71
16	---	---	---	---	---	---	---	8.09	8.16	7.65	8.10	6.67
17	---	---	---	---	---	---	#8.86	8.14	8.19	7.73	8.18	6.68
18	---	---	---	---	---	---	---	8.21	8.19	7.86	8.18	6.76
19	---	---	---	---	---	---	---	8.22	8.18	7.92	7.97	6.94
20	---	---	---	---	---	---	---	8.30	8.18	7.90	7.88	6.86
21	---	---	---	---	---	---	---	8.22	8.16	7.87	7.89	6.89
22	---	---	---	---	---	---	---	8.13	8.07	5.78	7.93	7.06
23	---	---	---	---	---	---	---	7.93	7.98	6.79	8.01	7.08
24	---	---	---	---	---	---	---	7.87	7.97	6.82	8.12	7.07
25	---	---	---	---	---	---	---	7.86	8.07	6.78	8.19	7.20
26	---	---	---	---	---	---	#9.07	7.90	8.16	6.78	8.14	7.34
27	---	---	---	---	---	---	---	7.96	8.19	6.86	7.67	7.51
28	---	---	---	---	---	---	8.76	8.01	8.16	7.05	7.56	7.65
29	---	---	---	---	---	---	8.73	8.08	8.16	7.21	7.43	7.72
30	---	---	---	---	---	---	8.76	8.01	8.19	7.26	7.42	7.60
31	---	---	---	---	---	---	---	7.97	---	7.26	7.43	---

Result of takedown

SOUTHEAST ALASKA

JUNEAU--CONTINUED

582314134344801. Local number, CD04006619BDDD1055.

LOCATION.--Lat 58°23'14", long 134°34'48", in SE¹/₄ SE¹/₄ NW¹/₄ sec. 19, T. 40 S., R. 66 E. (Juneau B-2 NW quad), Hydrologic Unit 19010301, Near the northwest corner of garage at 9002 Gee Street, Juneau. Owner: Tim and Debbie Banaszak.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 2.0 in., depth 44.2 ft.

INSTRUMENTATION.--Intermittent measurement with chalked steel tape by U.S. Geological Survey February 2001 to June 2001. Electronic data logger and submersible pressure transducer June 2001 to September 2001.

DATUM.--Elevation of land-surface datum is 46.4 ft above sea level (determined by levels survey). Measuring point: Top of casing 0.80 ft above land-surface datum.

REMARKS.--Record good. Well also known as Banaszak well.

PERIOD OF RECORD.--February 2001 to current year.

EXTREMES FOR CURRENT YEAR.--Highest water level recorded during period February 2001 to September 2001, 6.10 ft below land-surface datum, September 15 and 16, lowest recorded, 7.86 ft below land-surface datum, February 7, result of tapedown.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO
SEPTEMBER 2001
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	7.68	6.70	6.91
2	---	---	---	---	---	---	---	---	---	7.73	6.85	6.86
3	---	---	---	---	---	---	---	---	---	7.76	6.95	6.86
4	---	---	---	---	---	---	---	---	---	7.76	6.97	6.98
5	---	---	---	---	---	---	---	---	---	7.56	7.00	6.74
6	---	---	---	---	---	---	---	---	---	7.35	7.04	6.55
7	---	---	---	---	#7.86	---	---	---	---	7.22	7.21	6.48
8	---	---	---	---	---	---	---	---	#7.52	7.04	7.31	6.45
9	---	---	---	---	---	---	---	---	7.54	7.03	7.34	6.45
10	---	---	---	---	---	---	---	---	7.57	7.03	7.40	6.73
11	---	---	---	---	---	---	---	---	7.59	7.07	7.46	6.95
12	---	---	---	---	---	---	---	---	7.66	7.20	7.54	7.08
13	---	---	---	---	---	---	---	---	7.65	7.18	7.56	6.56
14	---	---	---	---	---	---	---	---	7.65	7.14	7.51	6.15
15	---	---	---	---	---	---	---	---	7.68	7.14	7.50	6.10
16	---	---	---	---	---	---	---	---	7.67	7.17	7.50	6.10
17	---	---	---	---	---	---	---	---	7.67	7.23	7.60	6.12
18	---	---	---	---	---	---	---	---	7.66	7.35	7.62	6.22
19	---	---	---	---	---	---	---	---	7.64	7.39	7.41	6.39
20	---	---	---	---	---	---	---	---	7.64	7.32	7.31	6.41
21	---	---	---	---	---	---	---	---	7.60	7.28	7.33	6.43
22	---	---	---	---	---	---	---	---	7.51	6.64	7.36	6.62
23	---	---	---	---	---	---	---	---	7.41	6.23	7.45	6.62
24	---	---	---	---	---	---	---	---	7.39	6.24	7.57	6.61
25	---	---	---	---	---	---	---	---	7.51	6.22	7.66	6.73
26	---	---	---	---	---	---	---	---	7.63	6.21	7.60	6.89
27	---	---	---	---	---	---	---	---	7.64	6.28	7.13	7.07
28	---	---	---	---	---	---	---	---	7.61	6.49	6.98	7.25
29	---	---	---	---	---	---	---	---	7.61	6.67	6.83	7.32
30	---	---	---	---	---	---	---	---	7.64	6.70	6.82	7.23
31	---	---	---	---	---	---	---	---	---	6.69	6.86	---

Result of tapedown.

SOUTHEAST ALASKA

JUNEAU--CONTINUED

582314134351201. Local number, CD04006619BCDD2020.

LOCATION.--Lat 58°23'14", long 134°35'12", in SE¹/₄ SW¹/₄ NW¹/₄ sec. 19, T. 40 S., R. 66 E. (Juneau B-2 NW quad), Hydrologic Unit 19010301, Near the northwest corner of garage at 9220 Gee Street, Juneau. Owner: Don Thomas

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 1.5 in., depth 49.1 ft.

INSTRUMENTATION.--Intermittent measurement with chalked steel tape by U.S. Geological Survey April 2000 to January 2001. Electronic data logger and submersible pressure transducer January 2001 to current year.

DATUM.--Elevation of land-surface datum is 43.09 ft above sea level (determined by levels survey). Measuring point: Top of casing 0.92 ft above land-surface datum.

REMARKS.--Record good. Well also known as Don's well.

PERIOD OF RECORD.--April 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 5.93 ft below land-surface datum, July 24, 2000; lowest, 10.20 ft below land-surface datum, February 26, 2001

EXTREMES FOR CURRENT YEAR.--Highest water level recorded during period January to September 2001, 5.95 ft below land-surface datum, September 15, lowest recorded, 10.20 ft below land-surface datum, February 26.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO
SEPTEMBER 2001
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	8.94	9.24	9.89	9.74	8.40	7.92	6.81	7.00
2	---	---	#9.11	---	8.94	9.28	9.97	9.58	8.41	7.95	7.08	7.02
3	---	---	---	---	9.09	9.45	9.89	9.37	8.28	8.00	7.15	7.02
4	#8.59	---	#9.12	#9.36	9.19	9.58	9.87	9.17	8.15	7.99	7.16	7.33
5	---	---	---	---	9.25	9.62	9.85	9.17	8.12	7.68	7.17	6.96
6	---	#8.81	---	---	9.31	9.61	9.87	9.11	8.18	7.42	7.22	6.68
7	---	---	---	---	9.29	9.59	9.88	9.09	8.26	7.28	7.47	6.67
8	---	#8.86	---	---	9.33	9.56	9.89	9.13	8.22	7.15	7.60	6.63
9	---	---	#8.56	#9.14	9.43	9.39	9.89	8.89	8.22	7.19	7.62	6.66
10	---	---	---	#8.40	9.53	9.13	9.89	8.85	8.23	7.26	7.68	7.21
11	---	#8.91	#8.86	9.38	9.63	8.95	9.86	8.87	8.23	7.36	7.76	7.49
12	---	#8.74	#8.95	9.35	9.69	8.90	9.87	8.88	8.29	7.58	7.85	7.66
13	---	#8.76	---	9.38	9.60	8.93	9.93	8.92	8.24	7.58	7.74	6.72
14	---	#8.84	---	9.46	9.65	9.07	9.99	8.89	8.24	7.53	7.61	6.01
15	---	---	#9.28	9.27	9.71	9.08	9.97	8.94	8.21	7.53	7.58	5.95
16	---	#8.98	#9.38	9.18	9.72	9.10	9.93	9.00	8.18	7.57	7.58	6.14
17	---	#8.84	---	9.16	9.75	9.11	9.93	9.01	8.16	7.61	7.73	6.19
18	---	#8.81	---	9.10	9.80	9.19	10.01	8.99	8.11	7.74	7.75	6.39
19	---	#8.81	---	9.17	9.91	9.25	10.02	9.04	8.07	7.64	7.51	6.72
20	---	#8.82	---	9.21	9.95	9.43	10.01	9.09	8.00	7.45	7.37	6.94
21	---	#8.75	---	9.30	10.00	9.54	9.97	8.97	7.90	7.34	7.39	6.99
22	#8.26	---	---	9.34	10.02	9.56	9.92	8.91	7.77	6.68	7.39	7.28
23	---	---	---	9.27	10.05	9.60	9.89	8.76	7.59	6.26	7.53	7.20
24	---	---	---	9.22	10.06	9.59	9.89	8.69	7.58	6.29	7.73	7.19
25	---	#8.35	---	9.24	10.14	9.59	9.92	8.68	7.82	6.33	7.84	7.40
26	---	---	---	9.31	9.96	9.71	9.84	8.68	7.98	6.33	7.70	7.62
27	---	#8.64	---	9.13	9.34	9.72	9.80	8.70	7.90	6.47	7.07	7.89
28	---	#8.70	---	9.06	9.25	9.80	9.61	8.70	7.78	6.81	6.86	8.12
29	---	---	---	9.06	---	9.86	9.58	8.70	7.78	6.99	6.70	8.18
30	---	---	---	9.10	---	9.76	9.63	8.57	7.86	6.87	6.70	8.10
31	---	---	---	9.13	---	9.79	---	8.49	---	6.82	6.85	---

Result of Tapedown

SOUTHEAST ALASKA

JUNEAU--CONTINUED

582322134341001. Local number, CD04006619ACAB1050.

LOCATION.--Lat 58°23'20", long 134°34'17", in NE¹/₄ SW¹/₄ NE¹/₄ sec. 19, T. 40 S., R. 66 E. (Juneau B-2 NW quad), Hydrologic Unit 19010301. Well is located at 3737 North El Camino Street, 30 ft west of the southwest corner of the house and 70 ft from North El Camino Street, Juneau. Owner: Nicholas Hindman.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 2 in., depth drilled 15 ft, cased to 4.7 ft, screened 2.5 to 4.7 ft.

INSTRUMENTATION.--Intermittent measurement with chalked steel tape by U.S. Geological Survey, University of Alaska-Southeast or U.S. Forest Service personnel.

DATUM.--Elevation of land-surface datum is 43.87 ft above sea level (determined from levels survey). Measuring point: top of PVC casing 1.2 ft above land-surface datum.

REMARKS.--Observation well drilled by U.S. Geological Survey, designated as Duck Creek #17 (Hindman Well). Well sampled for water quality, September 3, 1997, January 26, 1998, and September 3, 1998.

PERIOD OF RECORD.--July 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.40 ft below land-surface datum, October 23, 1999; lowest measured, 2.53 ft below land-surface datum, March 12, 1998.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO
SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	1.51	APR 12	1.88
NOV 4	1.45	APR 24	2.15
APR 10	1.89	AUG 14	2.16

582326134341901. Local number, CD04006619ADBA1011.

LOCATION.--Lat 58°23'36", long 134°34'19", in NW¹/₄ SE¹/₄ NE¹/₄ sec. 19, T. 40 S., R. 66 E. (Juneau B-2 NW quad), Hydrologic Unit 19010301. Well is located 6 ft southeast of a bike path, 25 ft southeast of Mendenhall Loop Road, and about 450 ft southwest of intersection of Mendenhall Loop Road and Valley Boulevard, Juneau. Owner: Bruce B. Bigelow.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 1.25 in., depth 15 ft, screened 11 to 15 ft.

INSTRUMENTATION.--Intermittent measurement with chalked steel tape by U.S. Geological Survey or University of Alaska-Southeast personnel.

DATUM.--Elevation of land-surface datum is 45.76 ft above sea level (determined by levels survey). Measuring point: top of steel casing 1.3 ft above land-surface datum.

REMARKS.--Observation well drilled by U.S. Geological Survey, designated as Duck Creek #18 (Bigelow Well).

PERIOD OF RECORD.--June 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.01 ft above land-surface datum, July 25 and August 12, 1997; lowest measured, 2.55 ft below land-surface datum, April 23, 1999.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO
SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	0.70	APR 12	0.96
NOV 4	0.65	APR 24	1.40
APR 10	0.78	AUG 14	1.53

SOUTHEAST ALASKA

JUNEAU--CONTINUED

582359134352103. Local number, CD04006618CBCA3019 85177.

LOCATION.--Lat 58°23'59", long 134°35'21", SW¹/₄ NW¹/₄ SW¹/₄ sec.18, T. 40 S., R. 66 E. (Juneau B-2 NW quad), Hydrologic Unit 19010301, Mendenhall Loop Road, Juneau. Owner: Harlan Olsen.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 6 in., depth 40 ft, screened 30 to 40 ft.

INSTRUMENTATION.--Continuous strip-chart recorder November 1983 to August 1984. Digital recorder August 1984 to April 1997. Electronic data logger and submersible pressure transducer August 1997 to September 1998. Electronic data logger and encoder used September 1998 to current year.

DATUM.--Elevation of land-surface datum is 50.53 ft above sea level (determined by levels survey). Measuring point: Top of casing 0.77 ft above land-surface datum.

REMARKS.--Record good. Well also known as Mendenhall well.

PERIOD OF RECORD.--November 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded 4.89 ft below land-surface datum, September 25, 1990; lowest, 13.54 ft below land-surface datum, February 2, 1997.

EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 6.58 ft below land-surface datum, October 14-15, lowest recorded, 11.49 ft below land-surface datum, April 25-26.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO
SEPTEMBER 2001
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.04	9.16	8.86	11.05	8.82	9.30	10.81	11.35	9.98	10.37	9.23	8.78
2	8.39	9.16	9.12	10.91	8.82	9.36	10.92	11.32	9.98	10.43	9.23	8.59
3	8.61	8.90	9.27	10.26	9.00	9.61	11.00	10.92	9.94	10.45	9.23	8.59
4	8.83	8.87	9.24	9.91	9.03	9.81	11.00	10.38	9.84	10.52	9.23	8.69
5	8.63	8.87	7.45	9.91	9.10	9.92	10.98	10.27	9.84	10.45	9.24	8.31
6	7.79	9.05	7.42	9.69	9.24	10.00	10.98	10.17	9.84	10.30	9.24	8.07
7	7.55	9.12	7.45	9.57	9.31	9.87	10.98	10.17	9.87	10.18	9.26	7.96
8	7.46	9.18	7.54	9.60	9.44	9.80	11.05	10.23	9.91	9.89	9.48	7.93
9	7.46	9.24	7.74	9.60	9.68	9.55	11.05	9.70	9.91	9.80	9.51	7.93
10	7.47	9.31	7.96	9.66	9.84	8.95	11.04	9.64	9.96	9.72	9.57	8.19
11	7.19	8.65	8.27	9.91	10.00	8.58	11.01	9.64	9.98	9.70	9.64	8.37
12	6.85	8.42	8.56	9.95	10.13	8.56	11.01	9.73	10.06	9.72	9.71	8.58
13	6.62	8.45	8.74	10.05	10.19	8.56	11.05	9.79	10.07	9.68	9.79	8.09
14	6.58	8.61	9.02	10.25	10.22	8.71	11.14	9.81	10.09	9.65	9.83	7.81
15	6.58	8.80	9.23	9.72	10.28	8.78	11.17	9.87	10.15	9.62	9.85	7.80
16	6.88	8.98	9.32	9.54	10.31	8.92	11.17	9.98	10.21	9.62	9.85	7.62
17	7.16	8.48	9.70	9.44	10.38	8.92	11.17	10.04	10.21	9.64	9.96	7.62
18	7.34	8.45	9.77	9.32	10.46	8.96	11.26	10.16	10.22	9.72	10.05	7.67
19	7.69	8.54	10.04	9.38	10.59	9.12	11.30	10.23	10.22	9.77	9.94	7.83
20	7.69	8.56	10.08	9.46	10.72	9.40	11.35	10.38	10.21	9.77	9.82	7.62
21	7.87	8.55	10.22	9.65	10.82	9.59	11.35	10.38	10.24	9.77	9.82	7.62
22	7.84	8.09	10.32	9.78	10.88	9.74	11.35	10.37	10.21	9.24	9.88	7.81
23	7.93	7.79	10.47	9.66	11.00	9.90	11.36	10.19	10.17	9.24	9.96	7.80
24	7.96	7.74	10.61	9.59	11.01	9.99	11.39	9.98	10.15	9.24	10.05	7.80
25	8.02	7.80	10.64	9.59	11.16	10.11	11.48	9.93	10.20	9.24	10.15	7.95
26	8.12	8.04	10.79	9.66	11.08	10.33	11.46	9.91	10.30	9.24	10.13	8.18
27	8.30	8.27	10.95	9.25	9.48	10.48	11.46	9.91	10.31	9.24	9.65	8.42
28	8.56	8.51	11.08	9.04	9.37	10.56	11.32	9.94	10.31	9.23	9.40	8.61
29	8.85	8.56	11.08	9.04	---	10.68	11.29	10.04	10.33	9.23	9.04	8.74
30	9.06	8.74	11.11	9.10	---	10.70	11.29	10.06	10.36	9.23	8.90	8.52
31	9.06	---	11.05	9.07	---	10.70	---	10.03	---	9.23	8.78	---

SOUTH-CENTRAL ALASKA

MUNICIPALITY OF ANCHORAGE.

611725149335401. Local number, SB01400223BCCD1003.

LOCATION.--Lat 61°17'26", long 149°35'39", in SE¹/₄ SW¹/₄ NW¹/₄ sec.23, T.14 N., R.2 W.(Anchorage B-7SW quad), Hydrologic Unit 19020401, at Anchorage Regional Landfill, Glenn Highway and Hiland Road interchange, Anchorage. Owner: Municipality of Anchorage.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 6 in., depth 132 ft, cased to 118 ft, open hole. Casing perforated from 111 to 117 ft. Bedrock from 117 ft. Driller's log notes casing break at 80 ft.

INSTRUMENTATION.--Monthly measurement with chalked steel tape by U.S. Geological Survey personnel July 1997 to September 1999. electronic data logger from September 3, 1999 to current year.

DATUM.--Elevation of land surface datum is 542.56 ft above sea level (determined by level survey). Measuring point: Top of casing 3.4 ft above land-surface datum.

REMARKS.--Observation well drilled by Municipality of Anchorage, designated as KB-6.

PERIOD OF RECORD.--August 1986, July 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 107.88 ft below land-surface datum, June 7, 2000; lowest, 114.25 ft below land-surface datum, Aug. 21, 1986.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 109.68 ft. below land-surface datum, June 27, July 4 and July 5; lowest, 110.61 ft. below land-surface datum, February 27 and March 12.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO
SEPTEMBER 2001
DAILY HIGHEST WATER LEVELS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110.24	110.13	110.28	110.43	110.50	110.53	110.56	110.08	109.87	109.69	110.03	110.37
2	110.25	110.11	110.30	110.38	110.50	110.54	110.47	110.06	109.86	109.69	110.03	110.38
3	110.26	110.14	110.27	110.39	110.50	110.54	110.50	110.06	109.86	109.69	110.05	110.38
4	110.23	110.10	110.25	110.43	110.49	110.52	110.57	110.05	109.85	109.68	110.06	110.38
5	110.22	110.13	110.27	110.45	110.48	110.52	110.57	110.03	109.84	109.68	110.08	110.40
6	110.26	110.12	110.33	110.40	110.47	110.52	110.54	110.00	109.84	109.69	110.10	110.40
7	110.24	110.14	110.33	110.40	110.49	110.56	110.54	110.00	109.83	109.70	110.13	110.41
8	110.30	110.15	110.32	110.47	110.46	110.52	110.56	110.00	109.81	109.72	110.13	110.42
9	110.27	110.12	110.31	110.48	110.49	110.54	110.57	109.98	109.80	109.72	110.14	110.42
10	110.23	110.11	110.31	110.47	110.48	110.52	110.52	109.97	109.80	109.73	110.16	110.42
11	110.27	110.16	110.35	110.42	110.48	110.51	110.51	109.97	109.79	109.74	110.17	110.41
12	110.24	110.16	110.33	110.44	110.50	110.58	110.54	109.94	109.78	109.75	110.19	110.42
13	110.22	110.13	110.32	110.47	110.51	110.57	110.53	109.95	109.77	109.76	110.20	110.44
14	110.23	110.20	110.34	110.42	110.49	110.53	110.52	109.93	109.77	109.77	110.21	110.46
15	110.24	110.18	110.32	110.46	110.49	110.55	110.49	109.94	109.76	109.78	110.23	110.45
16	110.23	110.17	110.34	110.44	110.48	110.57	110.46	109.94	109.75	109.79	110.24	110.44
17	110.22	110.16	110.33	110.42	110.50	110.58	110.46	109.93	109.74	109.81	110.26	110.46
18	110.21	110.20	110.37	110.44	110.50	110.55	110.44	109.93	109.72	109.83	110.28	110.47
19	110.18	110.19	110.34	110.51	110.51	110.58	110.41	109.93	109.71	109.83	110.25	110.47
20	110.18	110.20	110.34	110.48	110.52	110.58	110.38	109.91	109.72	109.85	110.27	110.46
21	110.13	110.19	110.38	110.49	110.52	110.56	110.35	109.91	109.72	109.86	110.31	110.46
22	110.16	110.22	110.38	110.49	110.51	110.56	110.32	109.91	109.70	109.88	110.31	110.47
23	110.19	110.23	110.39	110.51	110.50	110.54	110.30	109.92	109.69	109.90	110.32	110.46
24	110.14	110.21	110.38	110.51	110.51	110.52	110.29	109.93	109.70	109.91	110.33	110.47
25	110.12	110.25	110.36	110.49	110.47	110.53	110.26	109.91	109.70	109.93	110.33	110.49
26	110.14	110.26	110.43	110.48	110.43	110.54	110.19	109.90	109.69	109.94	110.34	110.49
27	110.14	110.27	110.41	110.52	110.45	110.55	110.19	109.89	109.68	109.95	110.34	110.49
28	110.14	110.27	110.39	110.50	110.53	110.56	110.17	109.89	109.69	109.96	110.33	110.49
29	110.12	110.27	110.37	110.50	---	110.55	110.14	109.91	109.70	109.98	110.36	110.49
30	110.11	110.27	110.39	110.46	---	110.54	110.13	109.88	109.69	109.99	110.35	110.51
31	110.15	---	110.45	110.45	---	110.56	---	109.88	---	110.01	110.37	---
MEAN	110.20	110.18	110.34	110.46	110.49	110.55	110.42	109.95	109.76	109.81	110.22	110.44
MAX	110.30	110.27	110.45	110.52	110.53	110.58	110.57	110.08	109.87	110.01	110.37	110.51
MIN	110.11	110.10	110.25	110.38	110.43	110.51	110.13	109.88	109.68	109.68	110.03	110.37

YUKON ALASKA

FAIRBANKS NORTH STAR BOROUGH

644400147151501. Local number, FD00200224ABBB1001 51659.

LOCATION.--Lat 64°44'00", long 147°15'15", Hydrologic Unit 19040506, in road right-of-way at intersection of Nelson and Laurence Roads near North Pole. Owner: U.S. Army Corps of Engineers.

AQUIFER.--Chena Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Diameter 4-in., depth 30 ft, screened from 27.5 to 30 ft using a 2-in. diameter well point.

INSTRUMENTATION.--Strip-chart recorder from June 1976 to May 1980. Digital recorder--1-hour punch interval, from November 1983 to June 1995. Electronic data logger from June 1995 to present.

DATUM.--Elevation of land-surface datum is 503.5 ft above sea level (determined by levels survey). Measuring point: Top of casing 2.97 ft above land-surface datum.

REMARKS.--Observation well drilled by the U.S. Army Corps of Engineers designated as P-251. Missing record from January 25 through March 1 due to equipment malfunction.

PERIOD OF RECORD.--June 1976 to May 1980 and November 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.84 ft below land-surface datum, June 7, 1992; lowest, 13.70 ft below land-surface datum, February 18-20, 1988.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 11.61 ft below land-surface datum, October 5; lowest, 13.26 ft below land-surface datum, April 9-12.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO
SEPTEMBER 2001
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.62	12.17	12.48	12.77	---	---	13.21	12.81	12.92	12.69	12.28	11.89
2	11.63	12.19	12.50	12.77	---	13.07	13.21	12.80	12.93	12.68	12.26	11.90
3	11.63	12.21	12.51	12.76	---	13.09	13.21	12.79	12.93	12.67	12.22	11.91
4	11.62	12.24	12.52	12.78	---	13.09	13.23	12.78	12.94	12.66	12.19	11.90
5	11.61	12.25	12.52	12.77	---	13.09	13.23	12.78	12.96	12.65	12.16	11.91
6	11.62	12.27	12.54	12.77	---	13.10	13.23	12.77	12.96	12.63	12.14	11.93
7	11.63	12.28	12.56	12.76	---	13.10	13.24	12.77	12.96	12.62	12.11	11.94
8	11.64	12.30	12.58	12.77	---	13.11	13.25	12.77	12.94	12.61	12.09	11.96
9	11.68	12.31	12.59	12.79	---	13.11	13.25	12.77	12.92	12.59	12.08	11.98
10	11.68	12.32	12.59	12.81	---	13.11	13.25	12.77	12.91	12.58	12.06	11.98
11	11.68	12.32	12.61	12.80	---	13.10	13.24	12.78	12.89	12.57	12.05	11.99
12	11.70	12.35	12.62	12.80	---	13.12	13.25	12.77	12.87	12.57	12.04	11.99
13	11.72	12.36	12.63	12.81	---	13.13	13.25	12.78	12.86	12.56	12.02	12.00
14	11.73	12.37	12.63	12.81	---	13.13	13.23	12.78	12.85	12.55	12.01	12.04
15	11.74	12.38	12.64	12.82	---	13.13	13.21	12.79	12.83	12.53	11.99	12.07
16	11.77	12.38	12.64	12.84	---	13.14	13.18	12.81	12.81	12.53	11.98	12.09
17	11.80	12.38	12.65	12.83	---	13.15	13.16	12.82	12.80	12.52	11.96	12.10
18	11.84	12.39	12.65	12.84	---	13.15	13.13	12.84	12.79	12.51	11.95	12.13
19	11.86	12.39	12.67	12.84	---	13.16	13.09	12.86	12.78	12.50	11.92	12.15
20	11.89	12.39	12.68	12.85	---	13.16	13.06	12.87	12.78	12.50	11.91	12.16
21	11.91	12.39	12.69	12.86	---	13.17	13.04	12.87	12.77	12.49	11.90	12.18
22	11.92	12.40	12.71	12.86	---	13.17	13.01	12.88	12.76	12.48	11.89	12.19
23	11.96	12.40	12.71	12.87	---	13.17	12.98	12.89	12.75	12.47	11.88	12.21
24	12.00	12.41	12.72	12.88	---	13.17	12.96	12.90	12.75	12.45	11.87	12.23
25	12.02	12.42	12.73	---	---	13.18	12.94	12.89	12.75	12.44	11.86	12.26
26	12.04	12.42	12.73	---	---	13.18	12.91	12.89	12.74	12.43	11.86	12.29
27	12.06	12.43	12.75	---	---	13.19	12.88	12.90	12.73	12.41	11.86	12.31
28	12.08	12.45	12.75	---	---	13.20	12.87	12.90	12.72	12.39	11.86	12.33
29	12.10	12.46	12.75	---	---	13.20	12.85	12.90	12.71	12.36	11.87	12.35
30	12.12	12.47	12.75	---	---	13.21	12.83	12.91	12.70	12.34	11.87	12.37
31	12.14	---	12.76	---	---	13.21	---	12.91	---	12.31	11.88	---

YUKON ALASKA

FAIRBANKS NORTH STAR BOROUGH—CONTINUED

644528147131201. Local number, FD00200307ACBD1001 51660.

LOCATION.--Lat 64°45'28", long 147°13'12", Hydrologic Unit 19040506, inside Corps of Engineers Chena Lakes Project fenced compound, 120 ft west of headquarters building and 2 mi northeast of the intersection of Laurence and Nelson Roads. Owner: U.S. Army Corps of Engineers.

AQUIFER.--Chena Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Diameter 4-in., depth 31 ft, screened from 28.5 to 31 ft using a 2-in. diameter well point.

INSTRUMENTATION.--Continuous strip-chart recorder from June 1976 to May 1980. Digital recorder--1-hour punch interval, from October 1985 to April 1995. Electronic data logger used from April 1995 to present.

DATUM.--Elevation of land-surface datum is 494.7 ft above sea level (determined by levels survey). Measuring point: Top of casing 2.91 ft above land-surface datum.

REMARKS.--Observation well drilled by the U.S. Army Corps of Engineers, designated as P-252. Water levels from water years 1986 through 1990 were not previously published and are available from WATSTORE.

PERIOD OF RECORD.--June 1976 to May 1980 and October 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.85 ft below land-surface datum, June 8-9, 1992; lowest, 13.20 ft below land-surface datum September 15, 1976.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 8.26 ft below land-surface datum, October 6-7; lowest, 10.81 ft below land-surface datum, April 15-20.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO
SEPTEMBER 2001
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.28	8.74	9.18	9.71	10.16	10.44	10.71	10.62	10.42	10.28	10.10	9.57
2	8.29	8.76	9.20	9.73	10.17	10.45	10.72	10.62	10.41	10.28	10.08	9.57
3	8.29	8.78	9.22	9.75	10.19	10.46	10.72	10.62	10.40	10.28	10.05	9.56
4	8.29	8.80	9.23	9.76	10.20	10.47	10.73	10.62	10.40	10.28	10.02	9.55
5	8.27	8.82	9.25	9.78	10.21	10.48	10.73	10.62	10.40	10.27	10.00	9.55
6	8.26	8.84	9.26	9.79	10.23	10.49	10.74	10.62	10.40	10.27	9.99	9.55
7	8.26	8.86	9.28	9.81	10.24	10.50	10.75	10.62	10.40	10.27	9.97	9.56
8	8.27	8.87	9.30	9.81	10.25	10.51	10.76	10.62	10.38	10.27	9.95	9.56
9	8.30	8.89	9.33	9.83	10.26	10.52	10.77	10.62	10.37	10.25	9.94	9.56
10	8.32	8.90	9.34	9.86	10.27	10.53	10.77	10.62	10.35	10.24	9.93	9.55
11	8.32	8.90	9.37	9.88	10.28	10.53	10.78	10.61	10.34	10.23	9.92	9.54
12	8.34	8.92	9.39	9.90	10.29	10.54	10.78	10.61	10.33	10.23	9.90	9.53
13	8.34	8.94	9.40	9.91	10.31	10.55	10.79	10.61	10.32	10.22	9.89	9.53
14	8.34	8.94	9.42	9.93	10.32	10.57	10.80	10.60	10.31	10.22	9.87	9.54
15	8.34	8.96	9.44	9.94	10.33	10.58	10.80	10.60	10.31	10.21	9.84	9.57
16	8.36	8.98	9.45	9.95	10.34	10.58	10.81	10.58	10.30	10.21	9.83	9.58
17	8.38	8.99	9.46	9.97	10.34	10.60	10.80	10.57	10.29	10.20	9.81	9.58
18	8.41	9.00	9.48	9.98	10.35	10.61	10.80	10.58	10.28	10.20	9.79	9.58
19	8.44	9.01	9.49	9.99	10.36	10.62	10.81	10.58	10.27	10.20	9.75	9.59
20	8.47	9.02	9.51	10.01	10.37	10.62	10.80	10.57	10.26	10.20	9.73	9.60
21	8.50	9.03	9.53	10.02	10.38	10.64	10.79	10.57	10.26	10.20	9.72	9.60
22	8.51	9.04	9.55	10.03	10.39	10.64	10.78	10.56	10.26	10.18	9.70	9.60
23	8.52	9.05	9.57	10.05	10.41	10.65	10.75	10.55	10.26	10.18	9.67	9.61
24	8.56	9.06	9.59	10.06	10.41	10.66	10.73	10.55	10.26	10.19	9.66	9.62
25	8.59	9.07	9.60	10.08	10.42	10.66	10.71	10.51	10.26	10.19	9.64	9.63
26	8.62	9.09	9.61	10.09	10.42	10.66	10.69	10.49	10.27	10.19	9.63	9.66
27	8.64	9.11	9.63	10.10	10.42	10.67	10.66	10.47	10.27	10.18	9.62	9.67
28	8.66	9.13	9.65	10.12	10.43	10.68	10.64	10.46	10.27	10.17	9.61	9.69
29	8.69	9.15	9.67	10.13	---	10.68	10.63	10.45	10.27	10.16	9.60	9.71
30	8.70	9.16	9.68	10.14	---	10.69	10.62	10.44	10.28	10.14	9.58	9.73
31	8.71	---	9.70	10.15	---	10.70	---	10.43	---	10.12	9.57	---

YUKON ALASKA

FAIRBANKS NORTH STAR BOROUGH—CONTINUED

645434147385101. Local number, FB00100113DDBC2001 50673.

LOCATION.--Lat 64°54'34", long 147°38'51", Hydrologic Unit 19040506, in road right-of-way at 2.3 mi McGrath Road, off Farmers' Loop Road near Fairbanks. Owner: U.S. Geological Survey.

AQUIFER.--Quartz-mica schist of pre-Jurassic age.

WELL CHARACTERISTICS.--Diameter 6-in., depth 100 ft, metal casing to 98.5 ft, perforated openings from 88.5 ft to 98.5 ft, and open hole to 100 ft.

INSTRUMENTATION.--Digital recorder, from October 1983 to June 1995. Electronic data logger from June 1995 to May 1996. Digital recorder, from May 1996 to September 1997. Electronic data logger from October 1997 to present.

DATUM.--Elevation of land-surface datum is 740 ft above sea level (determined from topographic map). Measuring point is top of casing 1.00 ft above land-surface datum.

REMARKS.--Observation well drilled by the U.S. Geological Survey, designated as McGrath Well, replaces old McGrath Estates well, 645429147383801. Missing record from Jan. 29 through Feb. 3 due to equipment malfunction.

PERIOD OF RECORD.--June 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.13 ft below land-surface datum, October 28, 1983; lowest, 44.85 ft below land-surface datum, July 3, 1990.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 42.33 ft below land-surface datum, September 13; lowest, 43.00 ft below land-surface datum, June 26.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO
SEPTEMBER 2001
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42.89	42.70	42.64	42.50	---	42.60	42.62	42.61	42.54	42.73	42.58	42.46
2	42.96	42.66	42.64	42.58	---	42.65	42.70	42.56	42.58	42.73	42.55	42.51
3	42.93	42.65	42.67	42.42	---	42.66	42.52	42.55	42.56	42.69	42.52	42.48
4	42.83	42.72	42.64	42.44	42.69	42.71	42.52	42.56	42.71	42.65	42.53	42.49
5	42.71	42.75	42.48	42.54	42.71	42.66	42.60	42.56	42.62	42.66	42.59	42.46
6	42.70	42.75	42.49	42.56	42.62	42.65	42.64	42.63	42.59	42.61	42.61	42.51
7	42.70	42.71	42.69	42.40	42.62	42.60	42.64	42.53	42.57	42.63	42.65	42.57
8	42.74	42.72	42.72	42.40	42.53	42.64	42.73	42.53	42.55	42.68	42.67	42.58
9	42.88	42.69	42.62	42.47	42.52	42.56	42.77	42.56	42.52	42.66	42.60	42.60
10	42.76	42.58	42.50	42.65	42.58	42.55	42.68	42.56	42.54	42.56	42.57	42.50
11	42.75	42.58	42.54	42.60	42.54	42.47	42.58	42.54	42.61	42.56	42.56	42.44
12	42.68	42.63	42.66	42.49	42.57	42.50	42.59	42.54	42.60	42.58	42.57	42.34
13	42.68	42.60	42.59	42.48	42.64	42.61	42.68	42.53	42.56	42.60	42.56	42.33
14	42.63	42.60	42.58	42.56	42.65	42.67	42.75	42.46	42.56	42.61	42.48	42.38
15	42.63	42.65	42.55	42.54	42.62	42.57	42.81	42.46	42.62	42.61	42.49	42.52
16	42.65	42.66	42.53	42.57	42.52	42.57	42.71	42.48	42.62	42.64	42.47	42.52
17	42.71	42.64	42.52	42.46	42.48	42.63	42.67	42.50	42.55	42.71	42.50	42.54
18	42.75	42.64	42.45	42.46	42.54	42.74	42.67	42.50	42.59	42.70	42.50	42.51
19	42.79	42.70	42.50	42.45	42.64	42.78	42.72	42.54	42.60	42.66	42.53	42.51
20	42.74	42.67	42.55	42.51	42.66	42.74	42.68	42.64	42.56	42.66	42.45	42.45
21	42.71	42.57	42.55	42.57	42.71	42.74	42.66	42.58	42.56	42.68	42.47	42.39
22	42.65	42.57	42.58	42.58	42.70	42.72	42.66	42.50	42.74	42.66	42.51	42.35
23	42.70	42.65	42.57	42.57	42.64	42.61	42.62	42.49	42.62	42.70	42.46	42.39
24	42.83	42.67	42.56	42.58	42.64	42.54	42.62	42.54	42.58	42.72	42.46	42.51
25	42.74	42.67	42.40	42.58	42.51	42.48	42.62	42.52	42.70	42.71	42.49	42.56
26	42.73	42.72	42.40	42.51	42.45	42.50	42.61	42.49	42.87	42.66	42.50	42.56
27	42.72	42.77	42.48	42.46	42.35	42.53	42.51	42.51	42.75	42.65	42.54	42.56
28	42.75	42.78	42.55	42.51	42.36	42.58	42.51	42.55	42.68	42.61	42.53	42.56
29	42.79	42.70	42.44	---	---	42.65	42.53	42.65	42.68	42.58	42.47	42.54
30	42.67	42.68	42.42	---	---	42.59	42.57	42.65	42.75	42.60	42.41	42.52
31	42.67	---	42.45	---	---	42.58	---	42.54	---	42.58	42.41	---

	Page	Page
Alagnak River, 13 miles above mouth near		
Lower Barge near Levelock	380	
27 mi above mouth near McCormick		
near Levelock	380, 409	
below Nonvianuk River near Igiugig . . .	380, 408	
Aleknagik, Moody Creek at	362, 381	
Alsek River near Yakutat	139	
Analyses of samples collected at miscellaneous		
sites	387	
Anchorage, Municipality of, ground water levels . .	434	
Anchorage, Chester Creek at Arctic Blvd at	212	
Little Rabbit Creek at Goldenview		
Dr near	378, 403	
Rabbit Creek at Porcupine Trail Rd		
near	378, 402	
Ship Creek near	222	
South Branch of South Fork Chester		
Creek at tank trail near	378, 404	
South Fork Campbell Creek near	205	
South Fork Campbell Creek At Canyon		
Mouth near	378, 403	
Anchor Point, Anchor River at	377, 397	
Anchor River near	360, 377	
Chakok River 7.5 mi above mouth		
near	377, 396	
Stariski Creek near	378, 398	
Anchor River, above Twitter Creek		
near Homer	377, 396	
at Anchor Point	377, 397	
Chakok River 7.5 mi above mouth near . . .	396	
near Anchor Point	360, 377	
near Bald Mountain near Homer	377, 394	
Angoon, Favorite Creek near	126	
Aniak, Kuskokwim River at	288	
Antler River below Antler Lake near Auke Bay . . .	74	
Anvik River near Anvik	384	
Arctic Creek above tributary near Nome . . .	367, 384	
Arctic Slope Alaska, crest-stage partial-record		
stations in	368	
discharge measurement at miscellaneous		
sites in	386	
gaging-station records for	350	
Atigun River near Pump Station 4	386	
Atigun River tributary near Pump Station 4 . .	368, 386	
Auke Bay, Antler River below Antler Lake near . .	74	
Duck Creek above Kodzoff Trailer		
Park near	372	
Duck Creek at Duran St near	372	
Duck Creek at Mendenhall Blvd near	371	
Duck Creek at Steven Richards Blvd near . .	372	
Duck Creek at Taku Blvd near	371	
Duck Creek below Nancy St near	73, 372	
Jordan Creek above Yandukin Ave near	371	
Jordan Creek at Amalga St near	370	
Jordan Creek at Jennifer St near	370	
Jordan Creek at Nancy St near	370	
Jordan Creek below Egan Dr near	66, 371	
Jordan Creek below Thunder Mtn Trailer		
Park near	370	
Jordan Creek near	371	
Jordan Creek Tributary at Thunder Mtn		
Trailer Park near	370	
Mendenhall River at Brotherhood		
Bridge at	371, 388	
Mendenhall River near	70	
Montana Creek near	72	
Montana Creek at mouth near	371	
North Fork Peterson Creek near	358, 375	
Nugget Creek above diversion near	69	
Peterson Creek below North Fork near	135	
Peterson Creek tributary No 2 near	375	
Peterson Creek tributary No 3 near . . .	375, 389	
Peterson Creek tributary No 4 near . . .	375, 389	
Peterson Creek tributary No 6 near . . .	375, 389	
Peterson Creek tributary No 7 near . . .	374, 389	
Peterson Creek tributary No 8 near . . .	374, 389	
Upper Peterson Creek near	374, 389	
Banner Creek at Richardson	364, 382	
Barrow, Nunavak Creek near	350	
Battle Creek diversion above Bradley Lake		
near Homer	161	
Beaver Creek 2 mi above mouth near Bald		
Mtn near Homer	377, 395	
Berry Creek near Dot Lake	364, 382	
Big Boulder Creek at mi 135 near Haines	372	
Big Delta, Central Creek near	308	
Goodpaster River near	302	
Liese Creek near	301	
Sonora Creek near	306	
Sonora Creek above Tributary near	304	
Upper West Creek near	303	
Bonanza Creek tributary near Prospect		
Camp	366, 383	
Boulder Creek (Copper River basin) near		
Tiekel	359, 376	
Boulder Creek (Yukon River basin) near		
Central	363, 381	
Bradley River, below dam near Homer	166	
Middle Fork, below North Fork Bradley		
River near Homer	169	
Middle Fork, near Homer	167	
near Homer	165	
near tidewater near Homer	170	

Page	Page
Camp Creek near Sheep Mtn Lodge	247
Cantwell, Slime Creek near	364, 383
Central Creek near Big Delta	308
Central, Boulder Creek near	363, 381
Quartz Creek near.	363, 382
Chakok River, 7.5 mi above mouth near	377, 396
near Anchor Point.	377
Chena River, at Fairbanks	316
below Hunts Creek near Two Rivers	382
below Moose Creek Dam.	383
near Two Rivers	313
Chester Creek at Arctic Blvd at Anchorage	212
Chichagof Island, stream on, gaging-station	
records for	127
Chicken, Wade Creek Tributary near	289
Chikat River near Klukwan.	372
Chinkelyes Creek Tributary near	
Pedro Bay	362, 380
Chiroskey River near Unalakleet	367, 384
Chulitna River near Port Alsworth (southwest) . .	380
Coffman Creek near Cold Bay	373
Cold Bay, Frosty Creek near.	362, 380
Russell Creek near	277
Stapp Creek near	361, 379
Coldfoot, Slate Creek at	333
Competition Creek near Kivalina	385
Cooper Creek at mouth near Cooper Landing . . .	181
Cooper Landing, Cooper Creek at mouth near. . .	181
Kenai River at.	179
Cordova, Nicolet Creek near.	146
Cottonwood Creek near Wasilla	379
Council, Etta Creek near.	384
Crest-stage partial-record stations.	358
Crooked Creek, Kuskokwim River at	285
Cupola Peak Creek at Bear Cove	
near Sitka	358, 374
Currant Creek at mouth near Port Alsworth	380
Dahl Creek near Kobuk.	343
Deadhorse, Kuparuk River near	352
Sagavanirktok River tributary near. . . .	368, 386
Deep Creek 0.6 mi above Sterling Highway	
near Ninilchik.	378, 400
Definition of terms	30
Denali, Raft Creek near.	361, 379
Dennison Fork near Tetlin Junction	362, 381
Deshka River near Willow	262
Discontinued surface-water discharge or	
stage-only stations	xiii
Discontinued surface-water-quality stations. . . .	xxiv
Dome Creek, King Creek near	363, 381
Donnelly, Ruby Creek above Richardson	
Highway near	364
Dorothy Lake outlet near Juneau	55
Dot Lake, Berry Creek near	364, 382
Dragonfly Creek near Healy.	365, 383
Dry Creek (Copper River basin) near	
Glennallen	359, 376
Duck Creek, above Kodzoff Trailer Park	
near Auke Bay	372
at Duran St near Auke Bay.	372
at Mendenhall Blvd near Auke Bay.	371
at Steven Richards Blvd near Auke Bay	372
at Taku Blvd near Auke Bay	371
below Nancy St near Auke Bay	73, 372
Eagle, Yukon River at	290
Eklutna Lake near Palmer.	244
Eldorado Creek near Teller	367, 384
Etta Creek near Council	384
Exit Glacier Channel at mi 0.1 of Harding Trail	
near Seward	376, 390
Exit Glacier Creek Tributary at mi 0.6 of Harding	
Trail near Seward	376, 390
Exit Glacier Distributary at Exit Glacier Road	
near Seward	377, 391
Explanation of the records	14
Fairbanks, Chena River at.	316
ground-water levels	435
Little Chena River near	314
Tanana River at.	312
Favorite Creek near Angoon.	126
Fish Creek (on Revillagigedo Island) near	
Ketchikan	86
Fort Yukon, Porcupine River near.	381, 410
Fritz Creek near Homer	360, 377
Frosty Creek near Cold Bay	362, 380
Glacier Creek at Bruno Road near Seward . . .	360, 377
Glacier Fork near Summit Lake near	
Port Alsworth	406
Glennallen, Dry Creek near	359, 376
Tazlina River near	376
Globe Creek near Livengood	365, 383
Gold Creek, (Southeast) at Juneau	63
near Juneau.	370, 387
Gold Creek, (South-central), Susitna River at . . .	258
Gold Creek (Southwest) at Takotna	362, 381
Goldengate Creek near Nome.	367, 384
Goodpaster River near Big Delta	302
Green Lake (on Baranof Island) near Sitka	123

	Page		Page
Greens Creek (on Admiralty Island) at Greens Creek Mine near Juneau	124	Indian River (Southeast), above CBC Pumphouse near Sitka	373
Ground-water level data, selected wells	417	at Sitka	114
City and Borough of Juneau	417	near Sitka	107
Fairbanks-North Star Borough	435	Diversion to Sheldon Jackson College at Sawmill Creek Road at Sitka	374
Municipality of Anchorage	434	Indian River (Yukon), at Utopia	366, 384
Grouse Creek at Grouse Lake outlet near Seward	155	International Boundary, Yukon Territory, Porcupine River near	295
Gulkana River, at Gulkana	376	International Gaging Station Network, description	12
at Sourdough	145	records	54, 57, 139, 290, 295
Gustavus, Kahtaheena River near	81		
Kahtaheena River above upper falls near	78		
Haines, Big Boulder Creek at mi 135 near	372	Johnson River above Lateral Glacier near Tuxedni Bay	269
Kakuhan Creek near	75	Jordan Creek, above Yandunkin Ave near Auke Bay	371
Halfmile Creek above diversion near Klawock	97	at Amalga St near Auke Bay	370
Halfmile Creek below Highway near Klawock	373	at Jennifer St near Auke Bay	370
Happy Valley Camp, Sagavanirktok River tributary near	368, 386	at Nancy St near Auke Bay	370
Harding River near Wrangell	52	below Egan Dr near Auke Bay	66, 371
Healy, Dragonfly Creek near	365, 383	below Thunder Mtn Trailer Park near Auke Bay	370
Lignite Creek above mouth near	330	near Auke Bay	371
Healy Creek at Suntrana near Healy	325	Tributary at Thunder Mtn Trailer Park near Auke Bay	370
Homer, Anchor River above Twitter Creek near	377, 396	Juneau, Dorothy Lake outlet near	55
Anchor River near Bald Mtn near	377, 394	Gold Creek at	63
Battle Creek diversion above Bradley Lake near	161	Gold Creek near	370, 387
Beaver Creek 2 mi above mouth near Bald Mtn near	377, 395	Greens Creek at Greens Creek Mine near	124
Bradley River below dam near	166	Salmon Creek near	65
Bradley River near	165	Taku River near	57
Bradley River near Tidewater near	170	ground-water levels	417
Fritz Creek near	360, 377		
Middle Fork Bradley River below North Fork Bradley River near	169	Kadashan River (on Chichagof Island) above Hook Creek near Tenakee	127
Middle Fork Bradley River near	167	Kahtaheena River near Gustavus	81
Upper Bradley River near Nuka Glacier near	163	Kahtaheena River above upper falls near Gustavus	78
Upper Nuka River near park boundary near	159	Kakuhan Creek near Haines	75
Hope, Sixmile Creek near	200	Kandik River near Nation	381
Hydaburg, Reynolds Creek below Lake Mellen near	98	Kasaan, Old Tom Creek near	99
		Kenai River, at Cooper Landing	179
Igiugig, Alagnak River below Nonvianuk River near	380, 408	at Soldotna	191
Ikalukrok Creek 0.6 mi below Red Dog Creek near Kivalina	385	below mouth of Killey River near Sterling	190
Ikalukrok Creek, below Dudd Creek near Kivalina	385	below Skilak Lake Outlet near Sterling	184
above Red Dog Creek near Kivalina	385	Ketchikan, Fish Creek near	86
below Red Dog Creek near Kivalina	347	Swan Lake near	85
Iliamna River near Pedro Bay	280	Kiana, Kobuk River near	344
		Kijik River at mouth near Port Alsworth	380
		King Creek near Dome Creek	363, 381
		Kivalina, Competition Creek near	385

Page	Page
Ikiulukrok Creek 0.6 mi below Red Dog	McCarthy Creek at McCarthy 359, 376
Creek near 385	McCarthy, McCarthy Creek at 359, 376
Ikalukrok Creek above Red Dog Creek near . . 385	Mendenhall River at Brotherhood Bridge
Ikalukrok Creek below Dudd Creek near . . . 385	at Auke Bay 371, 388
Ikalukrok Creek below Red Dog Creek near . 347	Mendenhall River above Montana Creek
North Fork Red Dog Creek near 368, 385	near Auke Bay 371
Red Dog Creek above North Fork Red Dog	Mendenhall River near Auke Bay 70
Creek near 385	Middle Fork Bradley River, below North Fork
Red Dog Mine clean water ditch near 385	Bradley River near Homer 169
Red Dog Mine above mouth near 385	Middle Fork Bradley River near Homer 167
Tutak Creek near 368, 386	Middle Basin Creek near Tenakee 131
Wulik River above Ferric Creek near 345	Mineral Creek near Valdez 359, 376
Wulik River below Tutak Creek near 348	Miscellaneous sites, discharge at 370
Klawock, Halfmile Creek above Diversion near . . 97	Montana Creek, at mouth near Auke Bay 371
Halfmile Creek below Highway near 373	near Auke Bay 72
North Fork Stanley Creek near 88	Moody Creek at Aleknagik 381, 362
Stanley Creek near 92	Moose Creek, above Wishbone Hill near
Threemile Creek below Hwy near 373	Sutton 379, 405
Threemile Creek near 96	near Palmer 250
Threemile Creek Tributary near 373	Moose Creek Dam, Chena River below 383
Threemile Tributary Creek below Canyon	Municipal Reserve Creek at Pilot Station . . . 366, 384
near 372	Myrtle Creek near Kodiak 361, 379
Klukwan, Chilkat River near 372	
Knik River near Palmer 245	Nabesna, Little Jack Creek near 363, 382
Kobuk, Dahl Creek near 343	Nancy Lake tributary near Willow 361, 379
Kobuk River near Kiana 344	Nation, Nation River near 381
Kodiak, Myrtle Creek near 361, 379	Kandik River near 381
Terror River at mouth near 272	Nation River near Nation 381
Kodiak Island, streams on, crest-stage partial-	Nenana, Tanana River at 319
record stations on 361	Nicolet Creek near Cordova 146
gaging-station records for 272	Ninilchik, Deep Creek 0.6 mi above Sterling
Kuparuk River near Deadhorse 352	Highway near Ninilchik 378, 400
Kuskokwim River, at Aniak 288	Ninilchik River at 172
at Crooked Creek 285	Ninilchik River 1.5 mi below tributary
at Liskys Crossing near Stony River 284	near 378, 400
	Ninilchik River below tributary 3 near . . 378, 401
Lake Clark outlet near Port Alsworth 380	North Fork Deep Creek 4 mi above
Lawing, Wolverine Creek near 153	mouth near 378, 399
Levelock, Alagnak River 13 mi above	Stariski Creek 2 mi below unnamed
mouth near lower barge near 380	tributary near 378, 398
Alagnak River 27 miles above mouth	Nome, Arctic Creek above tributary near . . . 367, 384
near McCormick near 380, 409	Goldengate Creek near 367, 384
Liese Creek near Big Delta 301	Washington Creek near 367, 384
Lignite Creek above mouth near Healy 330	North Fork Deep Creek 4 mi above mouth
Little Chena River near Fairbanks 314	near Ninilchik 378, 399
Little Jack Creek near Nabesna 363, 382	North Fork Peterson Creek near Auke Bay . . 358, 375
Little Rabbit Creek, at Goldenview Drive	North Fork Red Dog Creek near Kivalina . . . 368, 385
near Anchorage 378, 403	North Fork Stanley Creek near Klawock
Little Susitna River near Palmer 256	(on Prince of Wales Island) 88
Livengood, Globe Creek near 365, 383	North Fork Tlikakila River near Port Alsworth . . 407
Matanuska River near Palmer 254	

	Page		Page
Northwest Alaska, crest-stage partial-record		Portage, Twentymile River below Glacier	
stations in	367	River near	204
discharge measurements at miscellaneous		Portage Creek at Portage Lake outlet near	
sites in.	384	Whittier	202
gaging-station records for.	340	Premier Creek near Sutton	360, 379
Noyes Slough at Minnie Street Bridge	383	Prince of Wales Island, streams on, gaging-	
Nugget Creek (Southeast) above diversion		station records for	88
near Auke Bay	69	Prospect Camp, Bonanza Creek tributary	
Nugget Creek (Yukon) near Wiseman	365, 383	near	366, 383
Nunavak Creek near Barrow	350	Prospect Creek near	365, 383
		Prospect Creek near Prospect Camp.	365, 383
Old Tom Creek (on Prince of Wales Island) near		Ptarmigan Creek tributary near Valdez	359, 376
Kasaan	99	Pump Station 4, Atigun River tributary near	368, 386
Ophir Creek, at Airport Rd at Yakutat	375	Atigun River near	386
near Yakutat	144, 375	Pump Station 10, Suzy Q Creek near	364, 382
tributary at confluence near Yakutat.	375		
		Quality of ground water	417
Palmer, Eklutna Lake near	244	Southcentral	434
Knik River near	245	Southeast	417
Little Susitna River near	256	Yukon	435
Matanuska River near.	254	Quartz Creek near Central.	363, 382
Moose Creek near.	250		
Wasilla Creek near	361, 379	Rabbit Creek, at Porcupine Trail Road	
Partial-record stations	358	near	378, 402
Paxson, Phelan Creek near	309	Raft Creek near Denali	361, 379
Pedro Bay, Chinkelyes Creek tributary near	362, 380	Ray River tributary near Stevens Village	363, 382
Iliamna River near	280	Red Dog Creek, above mouth near Kivalina	385
Peterson Creek, below North Fork near Auke Bay. 135		above North Fork Red Dog Creek near	
Tributary No 2 near Auke Bay	375	Kivalina	385
Tributary No 3 near Auke Bay	375, 389	Red Dog Mine clean water ditch near Kivalina	385
Tributary No 4 near Auke Bay	375, 389	Revillagigedo Island, streams on, gaging-station	
Tributary No 6 near Auke Bay	375, 389	records for	85
Tributary No 7 near Auke Bay	374, 389	Reynolds Creek below Lake Mellen near	
Phelan Creek near Paxson.	309	Hydaburg	98
Pilot Station, Municipal Reserve Creek at	366, 384	Richardson, Banner Creek at	364, 382
Porcupine River, at Pilot Station	336	Ruby Creek above Richardson Highway near	
near Fort Yukon	381, 410	Donnelly.	364
near International Boundary, Yukon		Russell Creek near Cold Bay	277
Territory	295		
Port Alsworth, Chulitna River near.	380	Sagavanirktok River, tributary near	
Currant Creek at mouth near	380	Deadhorse.	368, 386
Glacier Fork near Summit Lake near	406	tributary near Happy Valley Camp.	368, 386
Kijik River at mouth near.	380	Salcha River near Salchaket	311
Lake Clark outlet near	380	Salchaket, Salcha River near.	311
North Fork Tlikakila River near	407	Salmon Creek (Southeast) near Juneau	65
Tanalian River at mouth near	380	Sawmill Creek near Sitka	121, 374
Tlikakila River 12 mi above mouth near	407	Seward, Exit Glacier channel at mi 0.1 of	
Tlikakila River above North Fork		Harding Trail near	376, 390
Tlikakila River near	406	Exit Glacier Creek Tributary at mi 0.6 of	
Tlikakila River at mouth near.	380, 408	Harding Trail near	376, 390
Tlikakila River near Summit Lake near	406	Exit Glacier Distributary at Exit Glacier	
		Road near	377, 391

Page	Page
Glacier Creek at Bruno Rd near	360, 377
Grouse Creek at Grouse Lake outlet near . . .	155
Snow River near	178
Spruce Creek near	156
Shakespeare Creek at Whittier	360, 376
Sheep Mountain Lodge, Camp Creek near	247
Ship Creek near Anchorage	222
Silver Bay Tributary at Bear Cove near Sitka	122
Sitka, Cupola Peak Creek at Bear Cove near	358, 374
Green Lake near	123
Indian River above CBS Pumphouse near . . .	373
Indian River at	114
Indian River near	107
Indian River Diversion to Sheldon Jackson College at Sawmill Creek Rd at	374
Sawmill Creek below Upper Tailrace near . . .	374
Sawmill Creek near	121
Silver Bay Tributary at Bear Cover near	122
Swan Lake outlet at	373
Wrinklemouth Creek at mouth at	373
Situk River near Yakutat	140
Sixmile Creek near Hope	200
Skagway River at Skagway	372
Slate Creek at Coldfoot	333
Slime Creek near Cantwell	364, 383
Snow River near Seward	178
Snowden Creek near Wiseman	365, 383
Soldotna, Kenai River at	191
Solomon Gulch, at top of falls near Valdez	150
near Valdez	149
tailrace near Valdez	151
Solomon Lake near Valdez	148
Sonora Creek near Big Delta	306
Sonora Creek above Tributary near Big Delta	304
Sourdough, Gulkana River at	145
South-central Alaska, crest-stage partial-record stations in	359
discharge measurements at miscellaneous sites in	376
gaging-station records for	145
Southeast Alaska, crest-stage partial-record stations in	258
discharge measurements at miscellaneous sites in	370
gaging-station records for	50
South Branch of South Fork Chester Creek, at Boniface Parkway near Anchorage	304, 340
at tank trail near Anchorage	304, 338
South Fork Campbell Creek near Anchorage	189
South Fork Campbell Creek At Canyon Mouth Near Anchorage	403
Southwest Alaska, crest-stage partial-record stations in	362
discharge measurements at miscellaneous sites in	379
gaging-station records for	277
Special networks and programs	12
Spruce Creek near Seward	156
Staney Creek (on Prince of Wales Island) near Klawock	92
Stapp Creek near Cold Bay	361, 379
Stariski Creek, 2 mi below unnamed tributary near Ninilchik	378, 398
near Anchor Point	398, 378
Sterling, Kenai River below mouth of Killey River near	190
Kenai River below Skilak Lake outlet near . .	184
Stevens Village, Ray River tributary near	363, 382
Yukon River near	296
Stikine River near Wrangell	54
Stony River, Kuskokwim River at Liskys Crossing near	284
Summary of hydrologic conditions	4
Sunrise Lake Outlet near Wrangell	103
Susitna River at Gold Creek	258
Sutton, Moose Creek above Wishbone Hill near	379, 405
Premier Creek near	360, 379
Suzy Q Creek near Pump Station 10	64, 382
Swan Lake (on Revillagigedo Island) near Ketchikan	85
Swan Lake outlet at Sitka	373
Takotna, Gold Creek at	362, 381
Tatalina River near	281
Taku River near Juneau	57
Talkeetna River near Talkeetna	259
Tanalian River at mouth near Port Alsworth	380
Tanana River, at Fairbanks	312
at Nenana	319
near Tok Junction	382
Tatalina River near Takotna	281
Tazlina River near Glennallen	376
Teller, Eldorado Creek near	367, 384
Tenakee, Kadashan River above Hook Creek near	127
Middle Creek Basin Creek near	131
Terror River at mouth near Kodiak	272
Tetlin Junction, Dennison Fork near	362, 381
Threemile Creek, below Highway near Klawock	373
near Klawock	96
Tributary below Canyon near Klawock	372
Tributary near Klawock	373

	Page	Page
Tiekel, Boulder Creek near	359, 376	Woronkofski Island, Streams on, gaging station records for 103
Tlikakila River, 12 mi above mouth near Port Alsworth	407	Wrangell, Harding River near 52
above North Fork Tlikakila River near Port Alsworth	406	Stikine River near 54
at mouth near Port Alsworth	380, 408	Sunrise Lake Outlet near 103
near Summit Lake near Port Alsworth	406	Tyee Lake outlet near 50
Tok Junction, Tanana River near	382	Wulik River, above Ferric Creek near Kivalina . . . 345
Tutak Creek near Kivalina	368, 386	below Tutak Creek near Kivalina 348
Tuxedni Bay, Johnson River above Lateral Glacier near	269	Yakutat, Alsek River near 139
Twentymile River below Glacier River near Portage	204	Ophir Creek at Airport Rd at 375
Two Rivers, Chena River below Hunts Creek near	382	Ophir Creek near 144, 375
Chena River near	313	Ophir Creek Tributary at Confluence near 375
Tyee Lake Outlet near Wrangell	50	Situk River near 140
Unalakleet, Chirosky River near	367, 384	Yukon Alaska, crest-stage partial-record stations in 262
Unalakleet River above Chirosky River near	340	discharge measurements at miscellaneous sites in 381
Unalakleet River above Chirosky River near Unalakleet	340	gaging-station records for 289
Upper Bradley River near Nuka Glacier near Homer	163	Yukon River, at Eagle 290
Upper Nuka River near park boundary near Homer	159	at Pilot Station 336
Upper Peterson Creek near Auke Bay	374, 389	near Stevens Village 296
Upper West Creek near Big Delta	303	
Utopia, Indian River at	366, 384	
Utopia Creek at	366, 384	
Utopia Creek at Utopia	366, 384	
Valdez, Mineral Creek near	359, 376	
Ptarmigan Creek tributary near	359, 376	
Solomon Gulch at top of falls near	150	
Solomon Gulch near	151	
Solomon Gulch tailrace near	149	
Solomon Lake near	148	
Wade Creek Tributary near Chicken	289	
Washington Creek near Nome	367, 384	
Wasilla Creek near Palmer	361, 379	
Wasilla, Cottonwood Creek near	379	
Whittier, Portage Creek at Portage Lake outlet near	202	
Shakespeare Creek at	360, 376	
Willow, Deshka River near	262	
Nancy Lake Tributary near	361, 379	
Willow Creek near	260	
Wiseman, Nugget Creek near	365, 383	
Snowden Creek near	365, 383	
Wolverine Creek near Lawing	153	

CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
Length		
inch (in.)	2.54×10^1	millimeter
	2.54×10^{-2}	meter
foot (ft)	3.048×10^{-1}	meter
mile (mi)	1.609×10^0	kilometer
Area		
acre	4.047×10^3	square meter
	4.047×10^{-1}	square hectometer
	4.047×10^{-3}	square kilometer
square mile (mi ²)	2.590×10^0	square kilometer
Volume		
gallon (gal)	3.785×10^0	liter
	3.785×10^0	cubic decimeter
	3.785×10^{-3}	cubic meter
million gallons (Mgal)	3.785×10^3	cubic meter
	3.785×10^{-3}	cubic hectometer
cubic foot (ft ³)	2.832×10^1	cubic decimeter
	2.832×10^{-2}	cubic meter
cubic-foot-per-second day [(ft ³ /s) d]	2.447×10^3	cubic meter
	2.447×10^{-3}	cubic hectometer
acre-foot (acre-ft)	1.233×10^3	cubic meter
	1.233×10^{-3}	cubic hectometer
	1.233×10^{-6}	cubic kilometer
Flow		
cubic foot per second (ft ³ /s)	2.832×10^1	liter per second
	2.832×10^1	cubic decimeter per second
	2.832×10^{-2}	cubic meter per second
gallon per minute (gal/min)	6.309×10^{-2}	liter per second
	6.309×10^{-2}	cubic decimeter per second
	6.309×10^{-5}	cubic meter per second
million gallons per day (Mgal/d)	4.381×10^1	cubic decimeter per second
	4.381×10^{-2}	cubic meter per second
Mass		
ton (short)	9.072×10^{-1}	megagram or metric ton

Sea level: In this report “sea level” refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment for the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.